# H.264 Network DVR

# User Manual

---

## GUI Display with USB Mouse Control

Please read instructions thoroughly before operation and retain it for future reference.

For the actual display & operation, please refer to your DVR in hand.

**KD674_Manual_V1.0**

# IMPORTANT SAFEGUARD

| | CAUTION | |
|---|---|---|
| | RISK OF ELECTRIC SHOCK | |

**CAUTION:**

To reduce the risk of electric shock, do not expose this apparatus to rain or moisture. Only operate this apparatus from the type of power source indicated on the label. The company shall not be liable for any damages arising out of any improper use, even if we have been advised of the possibility of such damages.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly “lead-free” and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste. Contact your local dealer for procedures for recycling this equipment.

This apparatus is manufactured to comply with the radio interference requirements.

## *Disclaimer*

The information in this manual was current when released. We reserve the right to revise or remove any content in this manual at any time. We do not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of this manual. For the actual display & operation, please refer to your DVR in hand. The content of this manual is subject to change without notice.

The product & company names mentioned herein may be the registered trademarks or tradenames of their respective owners.

## *Grounding*

This is a Safety Class 1 Product (provided with a protective earthing ground incorporated in the power cord). The mains plug shall only be inserted in a socket outlet provided with a protective earth contact. Any interruption of the protective conductor inside or outside of the instrument is likely to make the instrument dangerous. Intentional interruption is prohibited.

## *Water & Moisture*

Do not expose this product to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the product.

## *MPEG4 Licensing*

THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD (“MPEG-4 VIDEO”) AND/OR (ii) DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG-4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE HTTP://WWW.MPEGLA.COM.

## *GPL Licensing*

This product contains codes which are developed by Third-Party-Companies and which are subject to the GNU General Public License (“GPL”) or the GNU Lesser Public License (“LGPL”).

The GPL Code used in this product is released without warranty and is subject to the copyright of the corresponding author.

Further source codes which are subject to the GPL-licenses are available upon request.

We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

ftp://ftp.dvrtw.com.tw/GPL/AV074/

## *Version*

Firmware: 1142-1039-1013-1026-0A-0000

# TABLE OF CONTENTS


**1. BEFORE USING THIS DVR ..... 1**

1.1 Package Content ..... 1
1.2 Front Panel ..... 1
1.3 Rear Panel ..... 2

**2. CONNECTION AND SETUP ..... 3**

2.1 SATA HDD Installation ..... 3
2.2 Camera Connection ..... 4
2.2.1 Normal Camera Connection ..... 4
2.2.2 PTZ Camera Connection ..... 4
2.3 DVR Power On ..... 5
2.4 Date and Time Setting ..... 5
2.5 Clear Hard Disk ..... 6
2.6 Password Setting ..... 6

**3. GUI DISPLAY WITH USB MOUSE CONTROL ..... 7**

3.1 Connect USB Mouse ..... 7
3.2 Quick Menu Bar ..... 7
3.2.1 Channel Switch ..... 7
3.2.2 PTZ Control Panel ..... 8
3.3 Main Menu ..... 8

**4. BASIC OPERATION ..... 9**

4.1 Live Page ..... 9
4.2 Record Icon ..... 9
4.3 Playback ..... 9
4.3.1 Playback Control ..... 10
4.3.2 Event Search ..... 10
4.3.3 Audio Playback ..... 10
4.4 User Level Switch ..... 10
4.5 Video Output Switch ..... 11

**5. FREQUENTLY-USED FUNCTIONS ..... 12**

5.1 Quick Search ..... 12
5.2 Record ..... 12
5.2.1 Quick record setting ..... 12
5.2.2 Detailed record setting ..... 12
5.3 Schedule Setting ..... 13
5.3.1 Record Timer ..... 13
5.3.2 Detection Timer ..... 14
5.4 Detection Setting ..... 14
5.5 PTZ Camera Setting ..... 15
5.6 System Setting ..... 16
5.6.1 Password Setting ..... 16
5.6.2 System Upgrade ..... 16
5.6.3 Video Backup ..... 16
5.6.4 Clear All HDD Data ..... 17
5.7 Network ..... 18

**6. REMOTE OPERATION ..... 19**

6.1 Supplied Licensed Software .....19
6.1.1 Installation & Network Connection .....19
6.1.2 Control Panel Overview .....20
6.1.3. General Operation .....22
6.1.4. E-Map .....24
6.2 IE Web Browser .....29
6.2.1 Event Playback & Download .....30
**APPENDIX 1 SPECIFICATIONS ..... 31**
**APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST ..... 32**
**APPENDIX 3 COMPATIBLE SATA HDD LIST ..... 33**
**APPENDIX 4 MAIN MENU STRUCTURE ..... 34**
**APPENDIX 5 DVR BATTERY REPLACEMENT ..... 35**

# 1. BEFORE USING THIS DVR

## 1.1 Package Content

☐ DVR
☐ IR Remote Controller
☐ CD Manual
☐ HDD screws
☐ Manual for IR Remote Controller
☐ Adapter & Power cord

## 1.2 Front Panel

1) LED Indicators

HDD HDD is reading or recording.
An alarm is triggered.
Timer recording is on.
Under playback status.
DVR is powered on.

2) ⏸ (▲) / ■ (▼) / ⏮ (◄) / ⏭ (►)

Press ▲ / ▼ / ◄ / ► to move up / down / left / right.
In the playback mode:
Press "⏸" to pause playback.
Press "■" to stop playback.
Press "⏭" to fast forward.
Press "⏮" to fast rewind.

3) MENU

Press "MENU" to enter the main menu.

4) ENTER

Press "ENTER" to confirm the setting.

5) LIST (Event List Search)

Press to quickly search the recorded files by four event lists: RECORD LIST / MOTION LIST / ALARM LIST / TIMER LIST, or select FULL LIST to show all the event logs.
To quickly search the time you want, select "QUICK SEARCH". Set the time range you want, and select "Start" to play the recorded video clip during the specified time.

6) PLAY

Press to playback the latest recorded data.

7) SLOW

In the playback mode, press to show slow playback.

8) ZOOM

Press to enlarge the picture of selected channel in the FRAME or FIELD recording mode.

9) SEQ

Press to display each channel in full screen one by one starting from CH1. When the last channel is displayed, it will repeat from CH1 again. To exit this mode, press "SEQ" again.

10) ⊞

Press to show the 4-channel display mode.

11) CH1 ~ 4

Press the channel number buttons to select the channel to display.

12) SEARCH

Press to enter the time search menu. Set the time range you want, and select "START" to play the recorded video clip during the specified time.

13) AUDIO (SLOW + ZOOM)

Press “SLOW” + “ZOOM” to select live or playback audio from audio channel 1~4.

| | |
|---|---|
| Live audio from audio channel 1~4 (indicated in white) | Playback audio from audio channel 1~4 (indicated in yellow) |
| Audio channel unselected | |

14) P.T.Z. (⊞ + SEQ)

Press “⊞” + “SEQ” at the same time to enter / exit the PTZ control mode.

15) USB port

There are two USB ports on the front panel, one for connecting your USB mouse for mouse control, and the other one for connecting your USB flash drive for video backup.

**Note:** It’s not allowed to have two USB mice or two USB flash drives connected on the front panel.

For the compatible USB flash drive list, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST” at page 32.

## 1.3 Rear Panel

1) VIDEO IN (1 ~ 4): Connect to the video connector of a camera.

**Note:** The DVR will automatically detect the video system of the camera, please make sure that the cameras are properly connected to the DVR and power-supplied before the DVR is turned on.

2) AUDIO IN (1~4)

Connect to the audio connector of a camera if the camera supports audio recording.

**Note:** To make a video backup with audio, make sure the camera which supports the audio function is connected to the video-in channel and audio-in channel. For example, the audio data from audio CH1 will be recorded with the video data from video CH1.

3) AUDIO OUT

Connect to a speaker with 1 mono audio output.

4) MONITOR

Connect to a CRT monitor for video output.

**Note:** When both MONITOR and VGA are connected, press the left key ◄ on the DVR front panel during DVR power-on to force the video output via MONITOR. For details, please refer to “4.5 Video Output Switch” at page 11.

5) VGA

Connect to a LCD monitor directly.

**Note:** When both MONITOR and VGA are connected, press the right key ► on the DVR front panel during DVR power-on to force the video output via VGA. For details, please refer to “4.5 Video Output Switch” at page 11.

6) EXTERNAL I/O

This port is used to connect external devices (external alarm, etc).

7) LAN

Connect to Internet by LAN cable.

8) DC 19V

Connect to the supplied adapter.

9) Power Switch

Switch to “**I**” to turn on the power, and “O” to turn off the power.

# 2. CONNECTION AND SETUP

Before the DVR is powered on, make sure you have installed a hard disk and connected at least one camera. For details, please refer to the following sections.

**Note:** The DVR is designed to automatically detect the video system of the connected cameras (NTSC or PAL). To make sure the system detection is correct, please check if the cameras are connected to the DVR and power-supplied before the DVR is powered on.

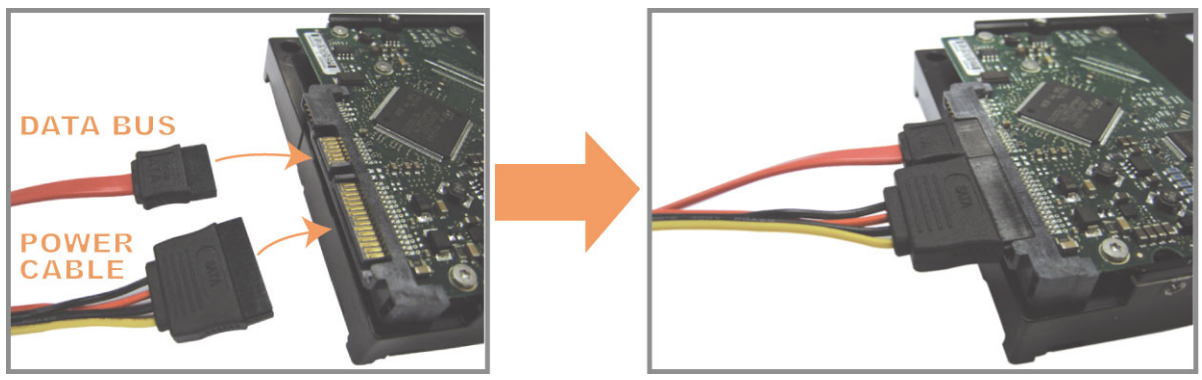
## 2.1 SATA HDD Installation

A SATA HDD must be installed before the DVR is powered on.

**Note:** It's recommended to clear all data in the hard disk when the DVR is powered on and the date & time are set correctly to ensure the recorded data are not mixed with other data previously saved in the same hard disk. For details, please refer to "5.6.4 Clear All HDD Data" at page 17.

Step1: Loose the screws on the upper cover and remove it from the DVR. Find the two HDD brackets located on the DVR base.

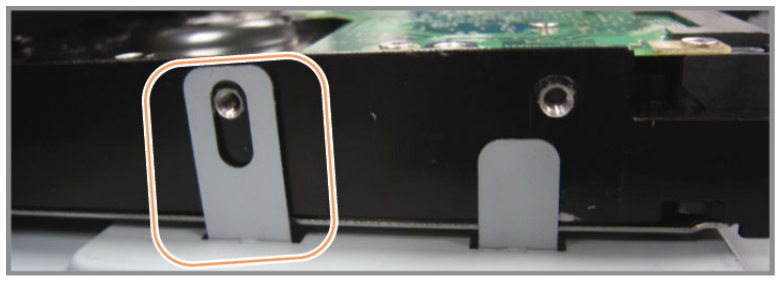
Step2: Get a compatible HDD, and connect it to the power connector and data bus connector.




Step3: Make sure the PCB side is facing up, and place the HDD between the HDD brackets on the DVR base as shown below.

**Make sure the other side of the HDD is contacted with the DVR base for heat conduction.**

Step4: Align the screw hole on the each bracket with the screw hole on the each side of the HDD as shown below, and fix the HDD to the bracket with a HDD screw supplied.



Step5: Close the upper cover of the DVR, and fasten all the screws you loosened in Step 1.

## 2.2 Camera Connection

The cameras must be connected and power-supplied before the DVR is powered on. Connect the camera with the indicated power supply. Then, connect the camera video output to the DVR video input port with a coaxial cable or RCA cable with BNC connectors.

**Note:** For detailed DVR video input ports, please refer to "1.3 Rear Panel" at page 2.

### 2.2.1 Normal Camera Connection

**Note:** For detailed camera installation and connection, please refer to its own user manual.

1) Connecting to DVR video input

   Connect the camera video output to the DVR video input port with a coaxial cable or RCA line with BNC connector.

2) Connecting to DVR audio input (Optional)

   Connect the camera audio output to the DVR audio input port with a coaxial cable or RCA cable with BNC connectors.

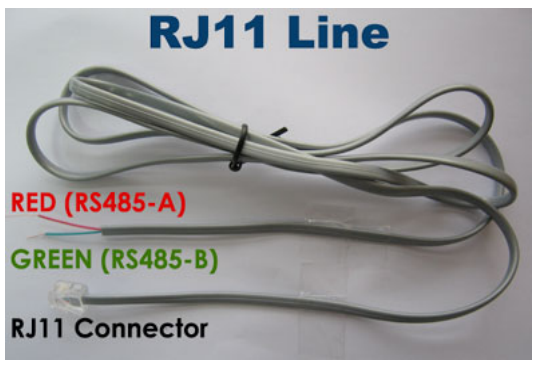
3) Connecting to power

   Connect the camera with indicated power supply and make sure it's power-supplied.

### 2.2.2 PTZ Camera Connection

The following description is taking our brand's PTZ camera as an example.

For DVR setting to control the PTZ camera, please refer to "5.5 PTZ Camera Setting" at page 15. For detailed PTZ camera control and operation, please refer to its own user manual.

| **RJ11 cable** |
| --- |
| RS485-A: **Red wire** |
| RS485-B: **Green wire** |
|  |
| *The RJ11 cable is not supplied in the sales package.* |

**STEP 1: Get a RJ11 cable with the proper length to your connection.**

Different RJ11 connector may have different wire layout, so the connection might be different. If you cannot control the DVR after connection, please reverse the RJ11 cable connection with the DVR.

**STEP 2: Remove one end of the insulating coating of the RJ11 cable.**

Remove one end of the insulating coating of the RJ11 cable to find the RS485-A and the RS485-B wires, and remove the insulating coating to reveal the naked wires for further connection.

**STEP 3: Twist the RS485-A and RS485-B wires of the RJ11 cable and the speed dome camera together.**

Twist the RS485-A (red) and RS485-B (green) wires of the RJ11 cable to the RS485-A (brown) and RS485-B (orange) wires of the speed dome camera. To protect the naked wires, use the insulation tape

to cover on the twisted wires.

**STEP 4: Connect the other end of the RJ11 cable to DVR.**

Solder the RS485-A (red) and RS485-B (green) wires of the RJ11 cable to the corresponding pins on the solder side of the optional D-Sub connector.

For connection details, please check with your installer.

**STEP 5: Set the speed dome camera at the DVR side.**

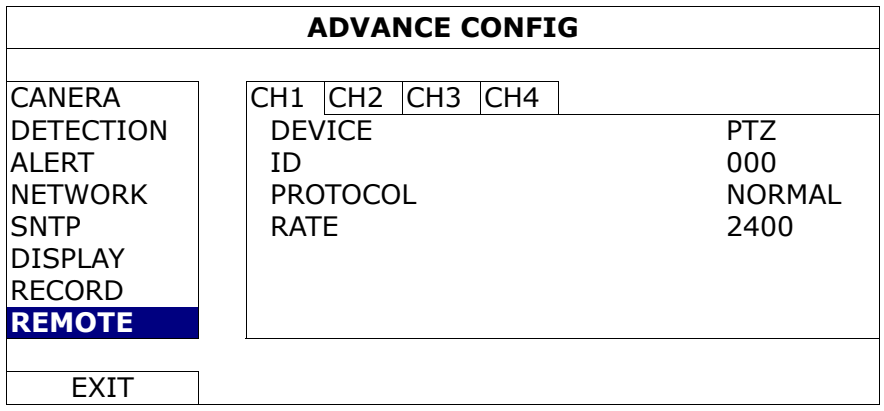
Go to “ADVANCE CONFIG” → “REMOTE” to set the speed dome camera.

a) Select the device to “PTZ”.

b) Set the ID to the value the same as the one set in the speed dome camera. The default ID of the camera is 000.

c) Select the protocol to “NORMAL”.

d) Set the baud rate to the value the same as the one set in the speed dome camera. The default baud rate of the camera is 2400.




## 2.3 DVR Power On

This device should be operated only with the type of power source indicated on the manufacturer’s label. Connect the indicated AC power cord to the power adapter, and plug into an electrical outlet. The power LED will be on.

**Note:** Before the DVR is powered on, make sure the cameras are connected and power-supplied for the detection of the camera video system to be correct.

**Note:** To ensure that your DVR works constantly and properly, it's recommended to use an UPS, Uninterruptible Power Supply (Optional), for continuously operation.

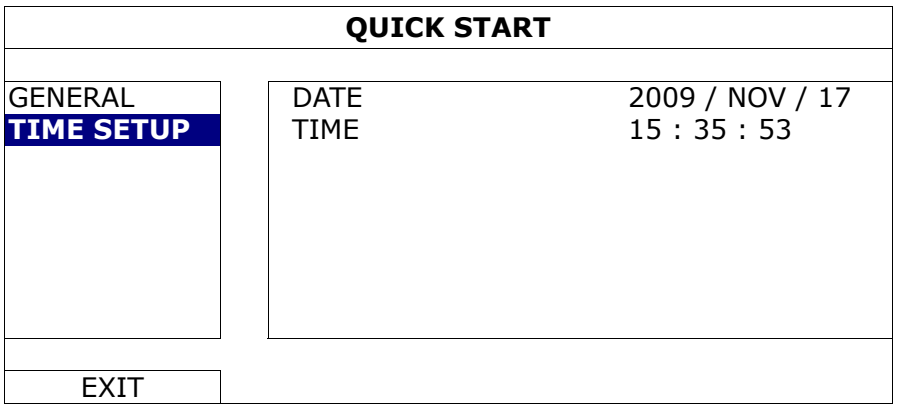
## 2.4 Date and Time Setting

Before operating your DVR, please set the date and time on your DVR **FIRST**.

**Note:** Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it’s recommended to clear all HDD data, and start recording again.

**Note:** For the first time to use the DVR, please power it on for at least 48 hours continuously after the date & time is set correctly. It helps to prevent DVR time from resetting after the disconnecting of DVR power. If the DVR time resets after the disconnecting of DVR power, for example, caused by a power outage, the battery might run out and please replace the battery as described in “APPENDIX 5 DVR BATTERY REPLACEMENT” at page 35.

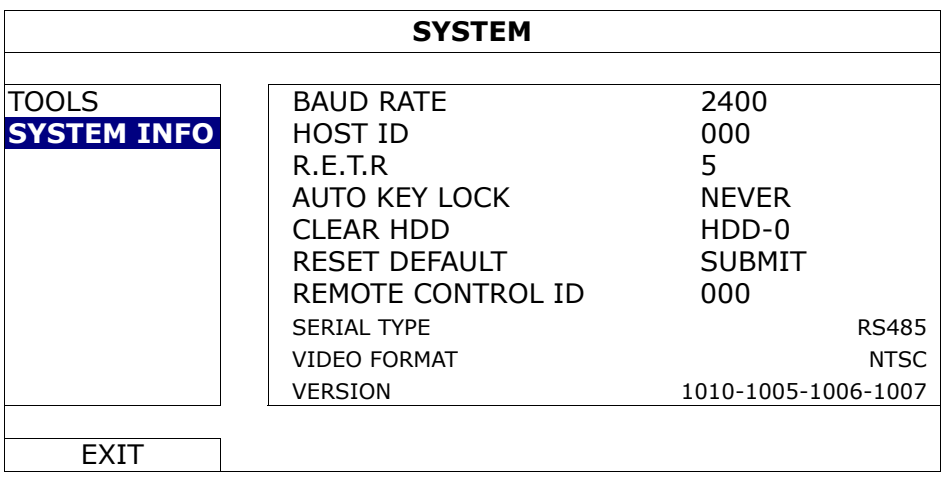
Right-click to enter the DVR password with the password keypad. The default administrator password is 0000. The status will be changed from (key lock) to (administrator). Then, right-click to show the main menu, and select “QUICK START” → “TIME SETUP” to set the date & time.




## 2.5 Clear Hard Disk

It's recommended to clear all data in the hard disk for the first time to user this DVR to ensure the recorded data are not mixed with other data previously saved in the same hard disk.

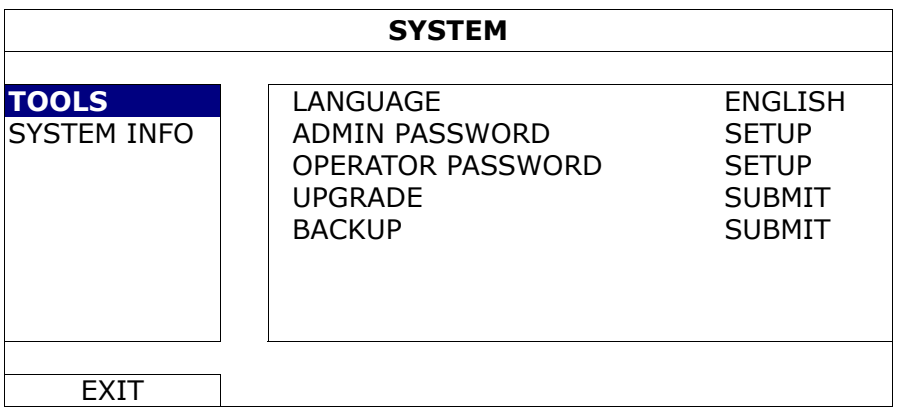
Right-click to show the main menu, and select "SYSTEM" → "SYSTEM INFO" → "CLEAR HDD". The DVR will reboot when HDD data are cleared.




## 2.6 Password Setting

Right-click to show the main menu, and select "SYSTEM" → "TOOLS" to change the DVR password.

There are two user levels: ADMIN & OPERATOR. For details, please refer to "4.4 User Level Switch" at page 10.



# 3. GUI DISPLAY WITH USB MOUSE CONTROL

## 3.1 Connect USB Mouse

Connect your USB mouse to one of the USB ports on the DVR front panel, and check if there's a mouse icon ( ) on the screen, indicating the USB mouse is detected properly.

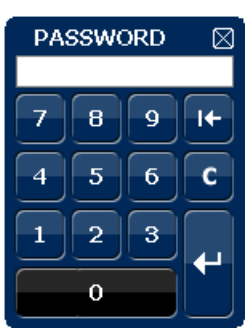
Move your mouse to enter the DVR password with the password keypad. The default administrator password is **0000**. The status will be changed from (key lock) to (administrator), and the quick menu bar appears on the left side of the screen.

---

**Note:** There are two user levels for DVR access which can be set in the main menu "SYSTEM" → "TOOLS". For details, please refer to "4.4 User Level Switch" at page 10.

---

**Password Input**




**Quick Menu: Close**

**Quick Menu: Open**

| | |
|---|---|
| CH | Click to show the channel switch panel and select the channel you want. For details, please refer to "3.2.1 Channel Switch" at page 7. |
| | Click to display the playback control panel, and click to play the latest recorded video clip, or click to enter the search list. For details, please refer to "4.3 Playback" at page 9. |
| | Switch to the channel you want first, and click to enter the zoom-in mode. In this mode, click and drag the red frame on the bottom left of the screen to move to the place you want to see. To exit this mode, click ☒. |
| | Click to select the audio channel you want:<br>In the live mode, only the live audio channels can be selected.<br>In the playback mode, live and playback audio channels can be selected. |
| | Click to enter the PTZ mode and show the PTZ camera control panel. For details, please refer to "3.2.1 PTZ Control Panel" at page 8. |

## 3.2 Quick Menu Bar

Move to the arrow mark to extend the quick menu bar and show the five functions as follows:

### 3.2.1 Channel Switch

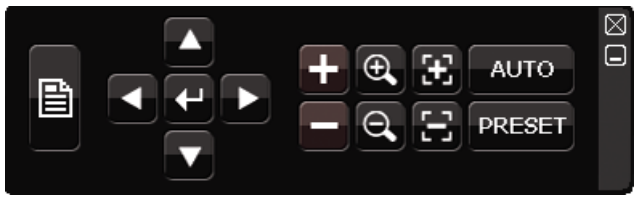
Click CH on the quick menu bar to display the panel as follows:

| | | |
|---|---|---|
| 1 2 3 4 | Video Channel 1~4 | Click to switch to the channel you want in full screen. |
| | Sequence Display | Click to display each channel in full screen one by one starting from CH1. When the last channel is displayed, it will repeat from CH1 again. |
| | Quad Display | Press to show the 4-channel display mode. |

### 3.2.2 PTZ Control Panel

**Note:** In the PTZ control mode, hot point is supported to move the camera view to the specified point after a click.

Click on the quick menu bar to display the panel as follows:



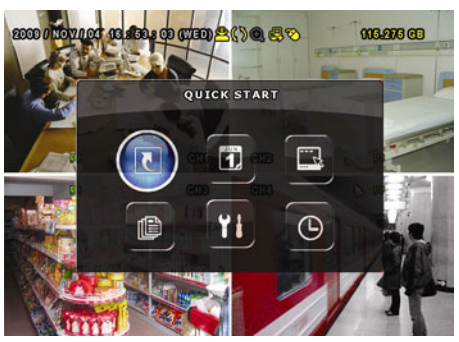

| | | |
|---|---|---|
| | Camera Menu | Click to enter the camera main menu.<br>For details about each camera menu, please refer to its own user manual. |
| | Enter | Click to confirm your selection / enter the menu. |
| / / / | Up / Down / Left / Right | Click to move your selection up / down / left / right, or change settings. |
| / | Zoom in / out max | Click to zoom in on the image to the largest / zoom out on the image to its original size. |
| / | Zoom in / out | Click to zoom in / out the image. |
| / | Focus near / far | Click to adjust the focus of the image. |
| AUTO | Auto mode | Click to activate the auto function.<br>Before using it, you need to assign a specific function that will be enabled when “AUTO” is clicked. For details, please refer to the user manual of the PTZ camera. |
| PRESET | Preset point | Click to enter the PTZ preset point you want to see. |

## 3.3 Main Menu

Right-click anywhere on the screen to show the main menu as follows, and right-click again to exit.

For details about the menu structure, please refer to “APPENDIX 4 MAIN MENU STRUCTURE” at page 34.

**Main Menu**




| | | |
|---|---|---|
| | QUICK START | Click to set the status display, image settings, and date & time. |
| | DATE SETUP | Click to set the date display and daylight saving. |
| | SYSTEM | Click to set the system configurations. |
| | EVENT INFORMATION | Click to enter the event search menu. |
| | ADVANCE CONFIG | Click to set CAMERA, DETECTION, ALERT, NETWORK, SNTP, DISPLAY, RECORD and REMOTE. |
| | SCHEDULE SETTING | Click to set record timer and detection timer. |

# 4. BASIC OPERATION

## 4.1 Live Page

| Icon | Function | Icon | Function | Icon | Function |
|---|---|---|---|---|---|
| | Live audio channel (1~4) | | Playback audio channel (1~4) | | Audio channel off |
| | Digital zoom on | | Digital zoom off | | Timer recording |
| | Network disconnected | | Internet connected | | LAN connected |
| | USB mouse connected | | USB flash drive / device connected | | HDD overwrite |
| | Key lock | | PTZ mode on | | Sequence |
| | Administrator | | Operator | | Motion |
| | Recording | | Alarm | | |

## 4.2 Record Icon

1) Manual Recording

By defaults, manual recording is on ( ) when the DVR is powered on and a HDD is installed.

2) Event Recording

When the motion detection or alarm is on, the motion icon ( ) or alarm icon ( ) shows on the screen for any motion or alarm event.

3) Timer Recording

When timer recording is on, you will see " " on the screen.

4) HDD Overwritten

Be defaults, the HDD overwritten function is set to ON, and " " will be shown on the screen.

## 4.3 Playback

Click " " on the quick menu bar to display the playback control panel, and click to play the latest recorded video clip, or click to enter the search list.

**Note:** There must be at least 8192 images of recorded data for playback to work properly. If not, the device will stop playback. For example, if the IPS is set to 30, the recording time should be at least 273 seconds (8192 images / 30 IPS) for the playback to work properly.

**Note:** During playback, the image size of the recording (FRAME, FIELD or CIF) will be shown on the screen.

### 4.3.1 Playback Control

| | | |
|---|---|---|
| | Fast Forward | Increase the speed for fast forward. Click once to get 4X speed forward and click twice to get 8X speed, etc., and the maximum speed is 32X. |
| | Fast Rewind | Increase the speed for fast rewind. Click once to get 4X speed rewind and click twice to get 8X speed, etc., and the maximum speed is 32X. |
| / | Play / Pause | Click to play the latest recorded video clip immediately, and click again to pause. In the pause mode, click once to get one frame forward, and click to get one frame rewind. |
| | Stop | Click to stop the video playback. |
| | Slow Playback | Click once to get 1/4X speed playback, and click twice to get 1/8X speed playback. |
| / | Previous / Next Hour | Click to jump to the next / previous time interval in an hour, for example, 11:00 ~ 12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded during this whole hour. |

### 4.3.2 Event Search

Click to quickly search the recorded files by four event lists: RECORD LIST / MOTION LIST / ALARM LIST / TIMER LIST, or select FULL LIST to show all the event logs.

To quickly search the time you want, select “QUICK SEARCH”. Set the time range you want, and select “Start” to play the recorded video clip during the specified time.

### 4.3.3 Audio Playback

In the playback mode, click on the quick menu bar as many times as needed to select live or playback audio from audio channel 1~4.

Live audio from audio channel 1~4 (indicated in white).

Playback audio from audio channel 1~4 (indicated in yellow).

Audio channel unselected

**Note:** To make a video backup with audio, make sure the camera which supports the audio function is connected to the video-in channel and audio-in channel. For example, the audio data from audio CH1 will be recorded with the video data from video CH1.

## 4.4 User Level Switch

In the key lock mode ( ), move your USB mouse to display the password input keypad. There are two user levels for accessing the DVR: Administrator ( ) & Operator ( ).

When the administrator password is entered, will be shown on the status bar of the screen and all operations are allowed. The default administrator password is 0000.

When the operator password is entered, will be shown on the status bar of the screen, and the main menu is **NOT** allowed to access. The operator user level needs to be set in the main menu “SYSTEM” → “TOOLS”.

To switch between these two user levels, click the current user level icon to switch to the key lock mode, and move

your mouse to show the password input keypad, and enter the password of the user level you want.

## 4.5 Video Output Switch

It's not allowed to have video output simultaneously on a CRT monitor (connected to "MONITOR") and LCD monitor (connected to "VGA").

The default video output setting is "AUTO", meaning the DVR will automatically detect the video output source. When "VGA" and "MONITOR" are both connected, the default monitor output is VGA.

To change the video output setting manually:

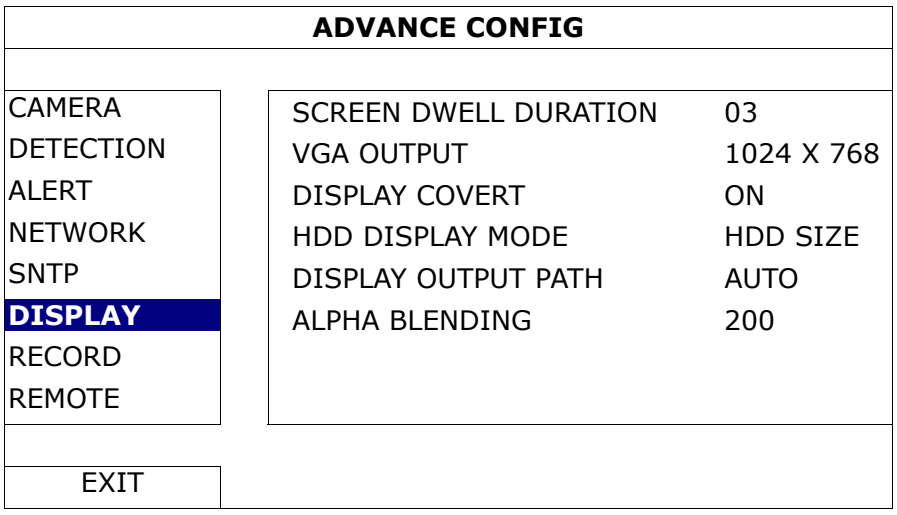
- To force the video output via "MONITOR", press the left key ◄ on the DVR front panel at DVR power-on.
- To force the video output via "VGA", press the right key ► on the DVR front panel at DVR power-on.

The setting is changed when you hear a short beep sound.

*OR:*

When the DVR is powered on and initialized, right-click to show the main menu, and select "ADVANCE CONFIG" → "DISPLAY" → "DISPLAY OUTPUT PATH".

Select "VGA" to switch to the connected LCD monitor, or "COMPOSITE" to switch to the connected CRT monitor. The DVR will then reboot for the change to take effect.



# 5. FREQUENTLY-USED FUNCTIONS

## 5.1 Quick Search

Press “SEARCH” on the DVR front panel to enter the time search menu as follows:

| QUICK SEARCH | |
|---|---|
| DATE | 2009/NOV/20 |
| TIME | 15:17:57 |
| HARD DISK | ALL HDD |
| SEARCH | START |

1) DATE / TIME

Select the date & time within which includes the data you want.

2) HARD DISK

Select the hard disk including the video data you want to search, or select “ALL HDD”.

3) SEARCH

Click “SUBMIT” to start search and play the video data immediately.

## 5.2 Record

### 5.2.1 Quick record setting

Right-click to display the main menu, and select “QUICK START” → “GENERAL”.

| QUICK START | | |
|---|---|---|
| GENERAL | CHANNEL TITLE | ON |
| TIME SETUP | EVENT STATUS | ON |
| | DATE DISPLAY | ON |
| | IMAGE SIZE | CIF |
| | QUALITY | SUPER BEST |
| | IMAGE PER SECOND | 120 |
| EXIT | | |

1) IMAGE SIZE

Select one of the image sizes: FRAME, FIELD or CIF.

2) QUALITY

Select one of the 4 quality options: SUPER BEST, BEST, HIGH & NORMAL.

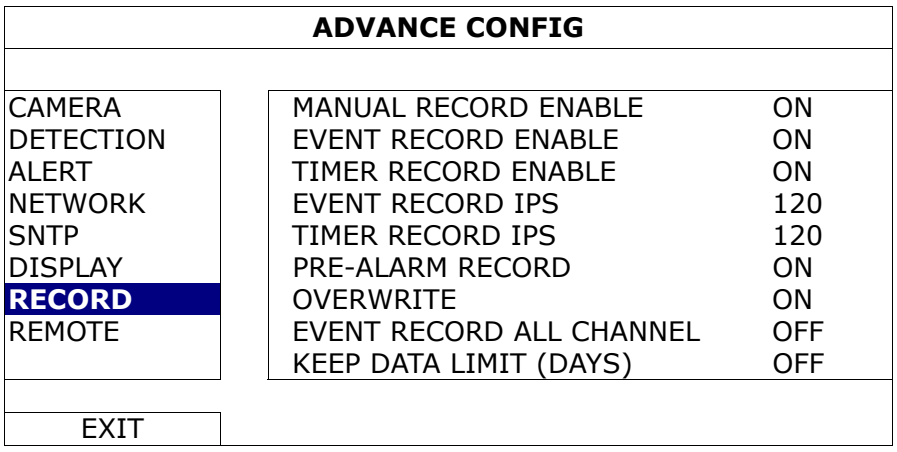
3) IMAGE PER SECOND

Select the images per second for MANUAL RECORD.

### 5.2.2 Detailed record setting

Right-click to display the main menu, and select “ADVANCE CONFIG” → “RECORD”.

**Note:** Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it’s recommended to clear all HDD data, and start recording again.




1) MANUAL RECORD ENABLE

Set the manual recording function on / off.

2) EVENT RECORD ENABLE

Set the event recording function on / off.

3) TIMER RECORD ENABLE

Set the timer recording function on / off.

4) EVENT RECORD IPS

Select the images per second for EVENT RECORD (Recording that is triggered by alarm or motion).

5) TIMER RECORD IPS

Select the images per second for TIMER RECORD (Recording that is activated according to the scheduled time).

6) PRE-ALARM RECORD

Select to enable or disable the pre-alarm function (ON / OFF).
When pre-alarm and event recording functions are both activated, the DVR will record 8MB data before an alarm / motion event is triggered.

7) OVERWRITE

Select “ON” to overwrite previous recorded data in your HDD when the HDD is full. When this function is on and the HDD is full, the DVR will clear 8GB data from the oldest for continuous recording without notice.

8) EVENT RECORD ALL CHANNEL

Select to record all channels (ON) or record the channel with an event only (OFF) for any event.

9) KEEP DATA LIMIT (DAYS)

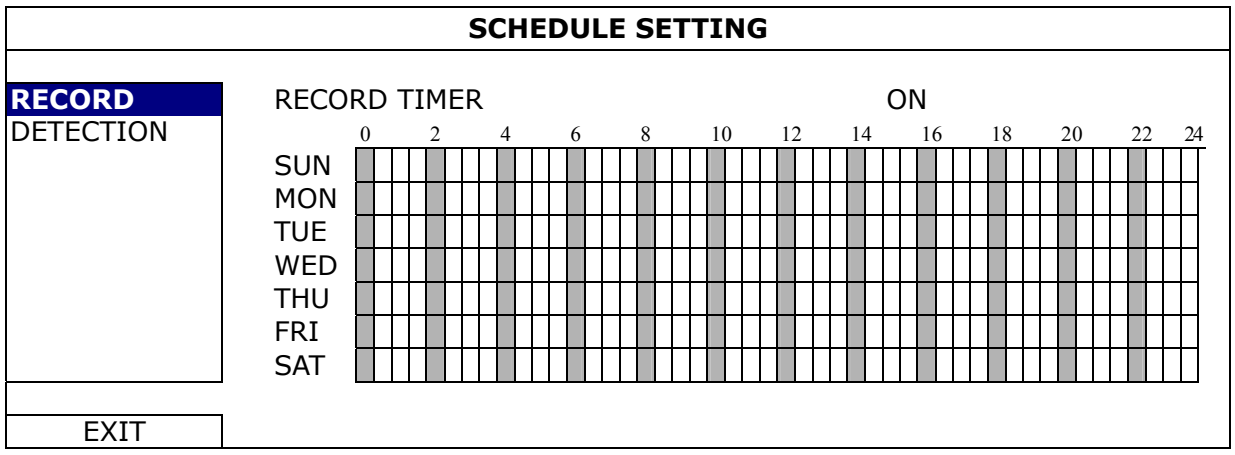
Assign the maximum recording days from 01 to 31 after which all the recorded data will be removed, or select “OFF” to disable this function.

## 5.3 Schedule Setting

Right-click to display the main menu, and select “SCHEDULE SETTING”.

### 5.3.1 Record Timer

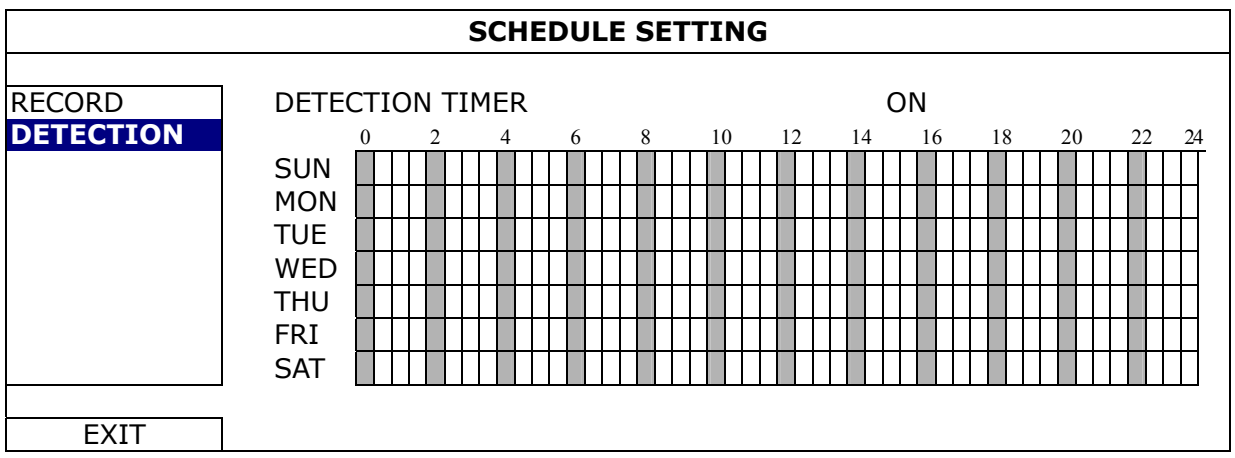
Click “RECORD”. In “RECORD TIMER”, select “ON” to enable record timer, and select the day and time for this function.




**X axis** 0 ~ 24 hours. Each time bar is 30 minutes.
**Y axis** Monday ~ Sunday.

### 5.3.2 Detection Timer

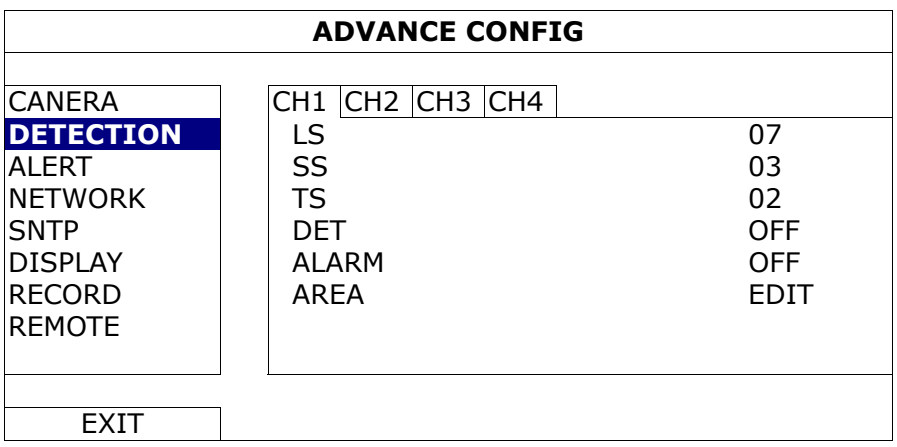
Click “DETECTION”. In “DETECTION TIMER”, select “ON” to enable record timer, and select the day and time for this function.




**X axis** 0 ~ 24 hours. Each time bar is 20 minutes.
**Y axis** Monday ~ Sunday.

## 5.4 Detection Setting

Right-click to display the main menu, and select “ADVANCE CONFIG” → “DETECTION”.




1) LS (Level of Sensitivity)

“LS” is to set the sensitivity of comparing two different images. The smaller the value is, the higher sensitivity for motion detection. The highest sensitivity setting is 00, and the lowest sensitivity setting is 15. The default value is 07.

2) SS (Spatial Sensitivity)

“SS” is to set the sensitivity for detecting the size of one object (the number of the grids) on the screen. The smaller the value is, the higher sensitivity for motion detection.
The highest sensitivity setting is 00, and the lowest sensitivity setting is 15. The default setting is 03.

**Note:** The default setting of SS is 03, which means once an object is detected more than 3 grids, the system will get triggered. So the value of SS must be less than the number of grids that you set up for the motion detection area.

3) TS (Time of Sensitivity)

"TS" is to set the sensitivity regarding how long one object stays in the detection area and triggers the recording. The smaller the value is, the higher sensitivity for motion detection.
The highest sensitivity setting is 00, and the lowest sensitivity setting is 15. The default setting is 02.

4) DET

Select if you want to activate the motion detection function for the selected channel (ON/OFF).

5) ALARM

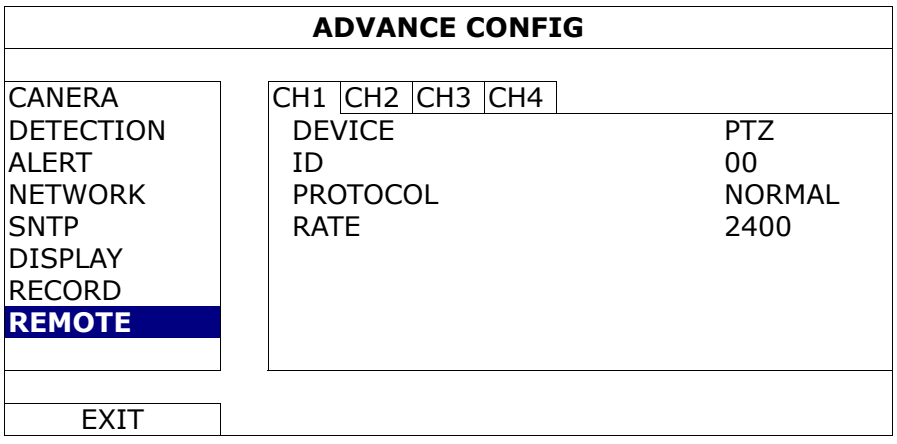
Select N.C./ N.O depending on your installation need. The default alarm value is OFF.

6) AREA

Click "EDIT" to set the motion detection area.
There are 16 × 12 grids per camera for all channels. Pink blocks represent the area that is not being detected while the transparent blocks are the area under detection.

## 5.5 PTZ Camera Setting

Right-click to display the main menu, and select "ADVANCE CONFIG" → "REMOTE".




1) DEVICE

For the PTZ camera, select "PTZ".

2) ID

Click the current value to set the ID number (0 ~ 255) for the connected PTZ camera if necessary.
Make sure the ID setting of the camera is the same as the setting here, or the DVR will not be able to control the device.

**Note:** To know the default ID of the PTZ camera, please refer to its user manual.

3) PROTOCOL

Select NORMAL (our protocol), P-D (PELCO-D) or P-P (PELCO-P) protocol.

4) RATE

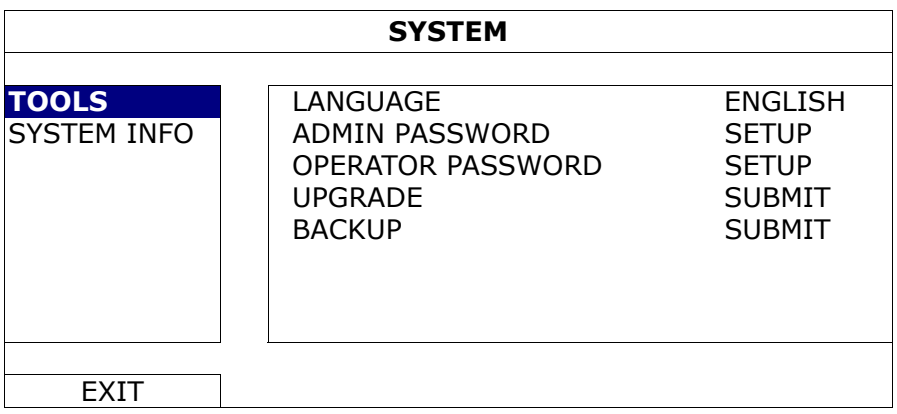
Select the baud rate for the connected PTZ camera (2400 / 4800 / 9600 / 19200 / 57600 / 115200).
Make sure the baud rate setting of the camera is the same as the setting here, or the DVR will not be able to control the device.

**Note:** To know the default baud rate of the PTZ camera, please refer to its user manual.

## 5.6 System Setting

### 5.6.1 Password Setting

Right-click to display the main menu, and select “SYSTEM” → “TOOLS”.




5) ADMIN PASSWORD

Click “SETUP” to change the administrator password. The default administrator password is **0000**.

When you’re prompted to enter the DVR password, enter the administrator password, and will be shown on the status bar of the screen and all operations are allowed.

6) OPERATOR PASSWORD

Click “SETUP” to set or change the operator password. .

When you’re prompted to enter the DVR password, enter the operator password, and will be shown on the status bar of the screen and the main menu is **NOT** allowed to access.

### 5.6.2 System Upgrade

**Note:** DVR system upgrade might cause all HDD data cleared when your current system version is too old from the latest version. Therefore, before upgrading the DVR system, check your current firmware version with your installer or distributor, and make video backup if necessary.

Right-click to display the main menu, and select “SYSTEM” → “TOOLS” → “UPGRADE”.

Save the upgrade files obtained from your installer or distributor in a compatible USB flash drive, and insert it into the USB port at the front panel.

Then, click “SUBMIT” to start upgrading.

**Note:** Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST” at page 32.

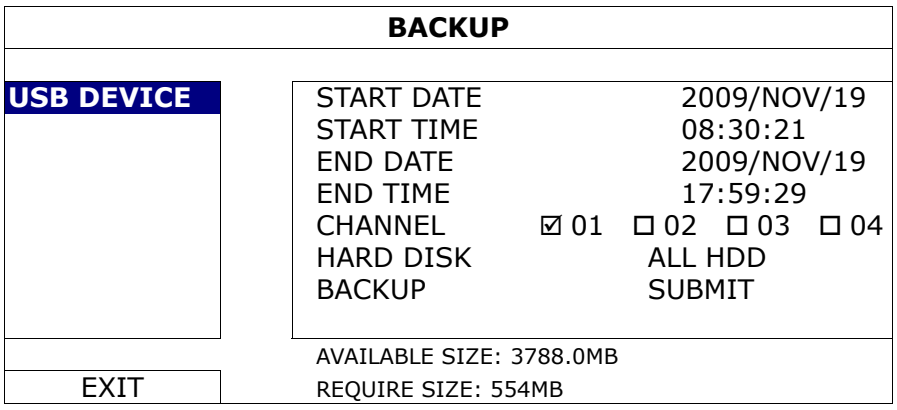
### 5.6.3 Video Backup

Right-click to display the main menu, and select “SYSTEM” → “TOOLS” → “BACKUP”.

Insert a compatible USB flash drive to the USB port at the front panel.

**Note:** Before using the USB flash drive, please use your PC to format the USB flash drive to FAT32 format first. For the list of compatible USB flash drives, please refer to “APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST” at page 32.

Then, click “SUBMIT” to enter the backup page as follows.




1) START DATE / START TIME
   Select the start date & time.

2) END DATE / TIME
   Select the end date & time.

3) CHANNEL
   Click to select the channel(s).

4) HARD DISK
   Select the hard disk containing the video data you need or “ALL HDD”.

5) BACKUP
   Click “SUBMIT” to start backup.

- Backup File Playback

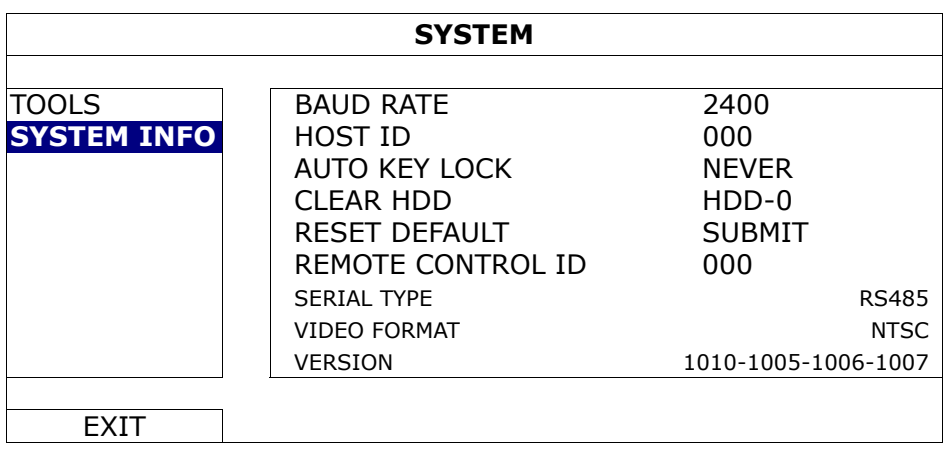
  During the backup process, a file player installer “PLAYER.EXE” will also be copied into your USB flash drive, and you will see the message “CHECK PLAYER” shown on the screen.

  Insert your USB flash drive to your PC and browse it. Install the file player “PLAYER.EXE”, and double click a backup file to play it directly in your PC and see if the backup is successful.

**Note:** The supported PC operating systems are Windows 7, Vista, XP & 2000.

### 5.6.4 Clear All HDD Data

Right-click to show the main menu, and select “SYSTEM” → “SYSTEM INFO” → “CLEAR HDD”.




Select the HDD you want to clear, and click “YES” to confirm or “NO” to cancel.

It’s recommended to clear all data in the hard disk when:

- It’s the first time to use this DVR to ensure the recorded data are not mixed with other data previously saved in the same hard disk.
- DVR date and time are changed accidentally when the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search.

## 5.7 Network

The description below is only for STATIC network type. For PPPOE and DHCP settings, you need to set from "Video Viewer".

For details, please download the extended user manual for "Video Viewer" from **http://www.surveillance-download.com/user/CMS.pdf**.

STATIC

**ADVANCE CONFIG**

| | | |
|---|---|---|
| CANERA | NETWORK TYPE | STATIC |
| DETECTION | IP | 192.168.001.010 |
| ALERT | GATEWAY | 192.168.001.254 |
| **NETWORK** | NETMASK | 255.255.255.000 |
| SNTP | PRIMARY DNS | 168.095.001.001 |
| DISPLAY | SECONDARY DNS | 139.175.055.244 |
| RECORD | PORT | 0080 |
| REMOTE | SAVE NETWORK SETTING | APPLY |
| EXIT | | |

1) NETWORK TYPE

Select the network type as STATIC and set all the information needed in the DVR.

2) NETWORK INFORMATION (IP / GATEWAY / NETMASK)

Key in all the network information obtained from your ISP (Internet Service Provider).

3) DNS (PRIMARY DNS / SECONDARY DNS)

Key in the IP address of the domain name server obtained from your ISP (Internet Service Provider).

4) PORT

The valid number ranges from 1 to 9999. The default value is 80. Typically, the TCP port used by HTTP is 80. However in some cases, it is better to change this port number for added flexibility or security.

5) SAVE NETWORK SETTING

Click "APPLY" to confirm the settings.

# 6. REMOTE OPERATION

You can also control the DVR remotely via the supplied licensed software “Video Viewer”, Internet Explorer web browser, and Apple’s QuickTime player.

## 6.1 Supplied Licensed Software

The sections below describe frequently-used functions of the Video Viewer. For details about this software and network settings, please download its extended user manual from the following link:
http://www.surveillance-download.com/user/CMS.pdf

### 6.1.1 Installation & Network Connection

1) Install the software

Step1: Place the supplied CD into your CD-ROM or DVD-ROM drive. The program will be automatically run.
Step2: Click “Download The Latest Version” under “Licensed Software AP” to download the latest version of Video Viewer from the Internet.
Step3: Follow the on-screen instructions to finish the installation. When the installation is completed, a shortcut icon “ ” will be placed on your PC desktop.

2) Network Connection

➢ Local Connection (via LAN)

LAN is used when it’s the first time to remotely access the DVR and you need to configure the network setting of your DVR based on your network type in advance.

a) Connect the DVR to your PC via a RJ45 network cable. The default DVR values are as follows:

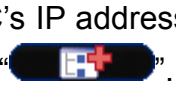
| Item | Default Value |
|---|---|
| IP address | 192.168.1.10 |
| User name | admin |
| Password | admin |
| Port | 80 |

b) Set the PC’s IP address as “192.168.1.XXX” (1~255, except 10) in order to make the PC and DVR under the same domain.

c) Double-click “ ” icon on your PC desktop to enter the control panel. By defaults, the “Address Book” panel will be displayed on the right side of the control panel.

d) Click “ ” → “ ” to key in the default IP address, user name, password, and port number of the DVR you intend to connect.

*OR*

Click “ ” → “ ” to search the available IP address(es) of other DVR(s) under the same domain as your PC’s IP address. The found address(es) will be listed, and can be added into the address book by clicking “  ”.

e) Double-click the IP address you just added into the address book to log in.

➢ Remote Connection (via Internet)

When the network configuration of your DVR is completed, you can access your DVR remotely via Internet.

a) Double-click “ ” icon on your PC desktop to enter the control panel. By defaults, the “Address Book”

panel will be displayed on the right side of the control panel.

b) Click " " → " " to key in the IP address, user name, password, and port number of the DVR you intend to connect.

*OR*

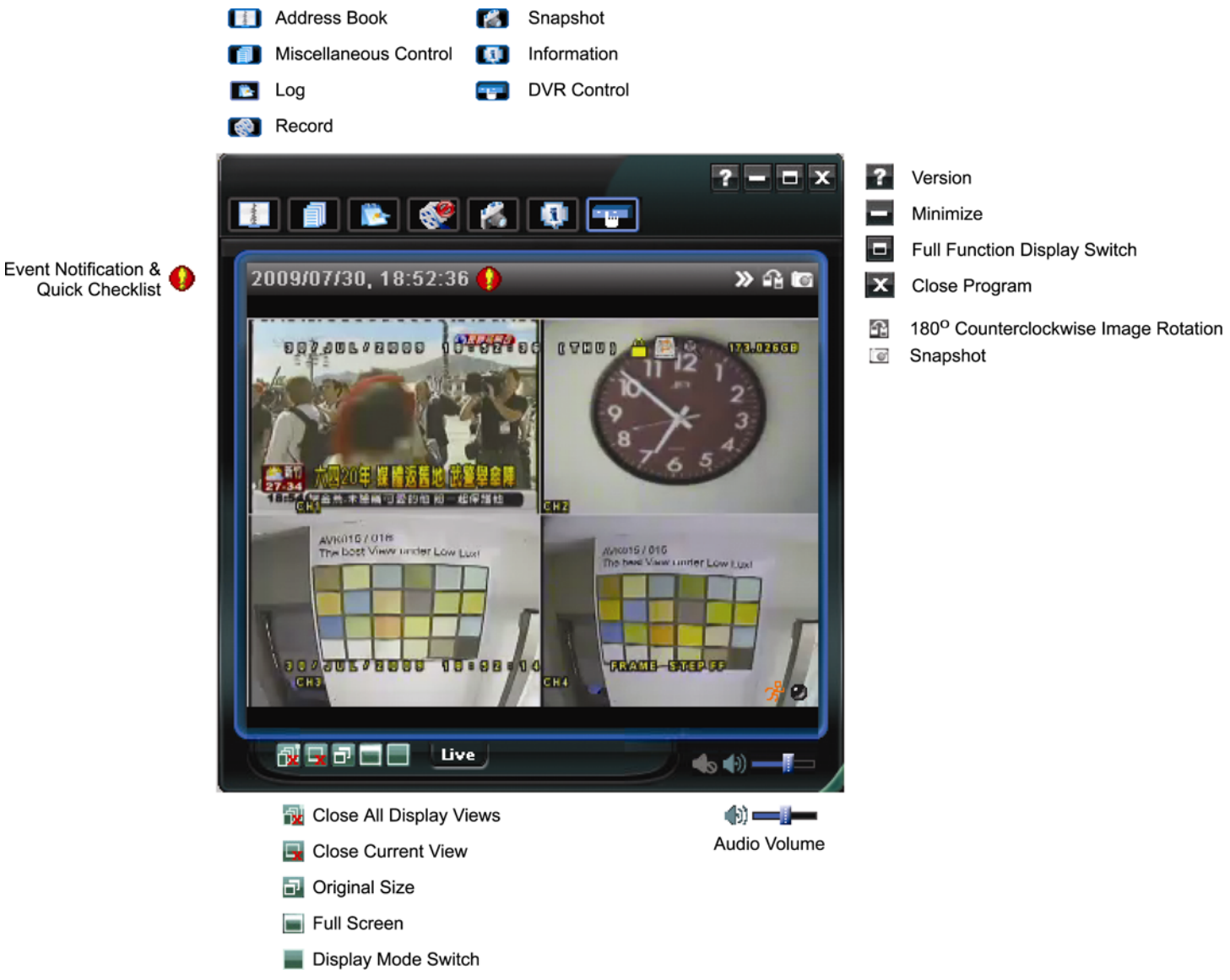
Click " " → " " to search the available IP address(es) of other DVR(s) under the same domain as your PC's IP address. The found address(es) will be listed, and can be added into the address book by clicking " ".

c) Double-click the IP address you just added into the address book to log in.

### 6.1.2 Control Panel Overview

Two control panels are available and can be switched depending on your use habit.

<u>Simplified Version (Default)</u>



## Full Function Version

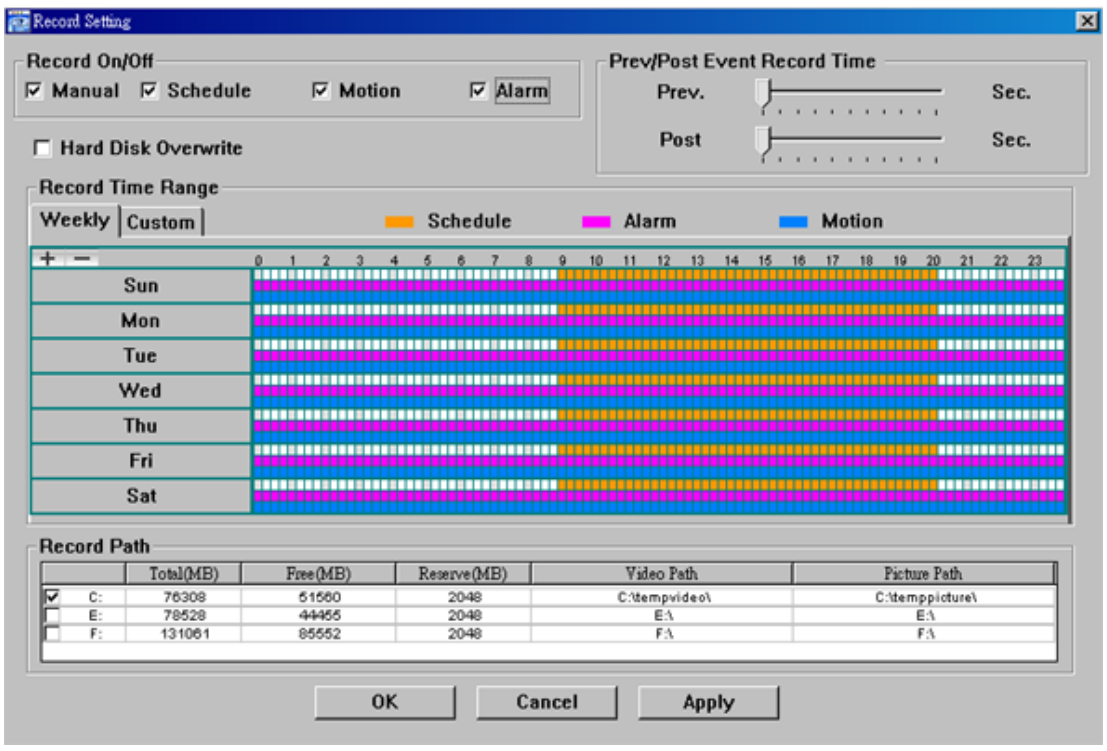
## Main Button Overview

| Button | | Function | Description | | |
|---|---|---|---|---|---|
| Simplified | Full Function | | | | |
| | | Address Book | Click to show the predefined IP address(es). You can add, remove or search the IP address to log in the DVR remotely. | | |
| | | Miscellaneous Control | | Remote Config | Click to go into the detailed DVR setting. |
| | | | | Record Setting | Click to go to the detailed record setting. |
| | | | | Custom Setting | Click to choose the language of this program. The language change will take effect when this program is closed and executed again. |
| | | Log | Click to view all event and recording logs, search the desired log(s) by date, or playback the recording of the selected log. | | |
| | | Record / Record Stop | Click to start / stop the manual recording. | | |
| | | Snapshot | Click to take a snapshot of the current view. The snapshot will be saved in the path you specified in “Record Setting”. | | |
| | | Information | Click to show the current network connection details. | | |
| | | DVR Control | Click to go to the DVR control panel to operate the DVR remotely. | | |

### 6.1.3. General Operation

## Record

To record remotely at the same time for any event or alarm at the DVR side, click “ ” or “ ” → “ ” to go to the “Record Setting” page.




In the “Record Setting” page, you can set the following items:

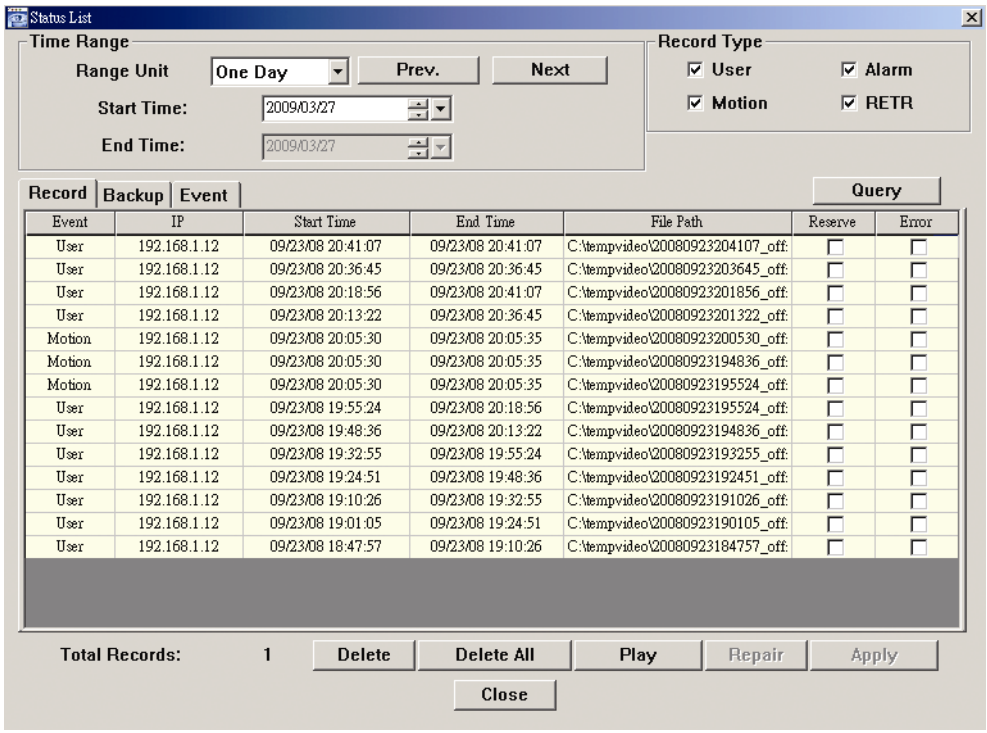
- Record type
- Hard disk overwriting
- Pre- / post-alarm record time
- Record time setting
- Record path

If “Manual” is checked, click “ ” or “ ” on the main control panel to start the manual recording immediately, and the recordings will be saved in the specified location.

If “Motion” and / or “Alarm” are checked, the recording function will also be enabled at the remote side when any event is triggered at the DVR side, and the recordings will be saved in the specified location.

## Playback

To play a recording, click “ ” or “ ”, and select the “Record” tab or “Backup” tab. A list of all the recordings will be shown by defaults, and you can also sort out the logs you want to speed up the search time.




To immediately play a recording, select a log from the list, and click “Play”, or double-click the selected log.

## Network Backup

Click “ ” → “”, or click “ ” to go into the “Backup” page as follows, and you can select a specific time range or event to make a video backup remotely.

The file(s) you backup will be from the currently selected IP address.




| Function | Description |
|---|---|
| HDD Number / Channel | Specify the hard disk (HDD Number) and channel number (Channel) within which have the video data you need. |
| Download by Time | Specify the time range within which has the video data you want in the “Start Time” and “End Time” columns. |
| Download by Event | Select an event log from the event list. This list shows all logs in the specified DVR from the latest to the earliest.<br>• To quickly find the events you need, check or uncheck the event type “System” / “Manual” / “Alarm” / “Motion”, and select the log you want.<br>• To view the earlier or later logs that are not shown in the current page, click “Prev. Page” or “Next Page”.<br>• To refresh the event list, click “Reload”. |
| File Path | Assign the location where the backup files are saved. |
| Simultaneous Playback | To view the backup images simultaneously when the download process is in progress, select the checkbox “Simultaneous Playback”. You will see the backup images while the images are being downloaded to the PC or notebook. |

| Function | Description |
|---|---|
| | To simply backup images without previewing, deselect the checkbox “Simultaneous Playback”. You will only see a message box indicating the total time needed, the current status and the saving location. |
| Download / Cancel | Click “Download” to start or “Cancel” to discard the video backup. |

### 6.1.4. E-Map

Video Viewer is also a Central Management System (CMS) software, which allows network device control & management for up to 16 devices simultaneously.

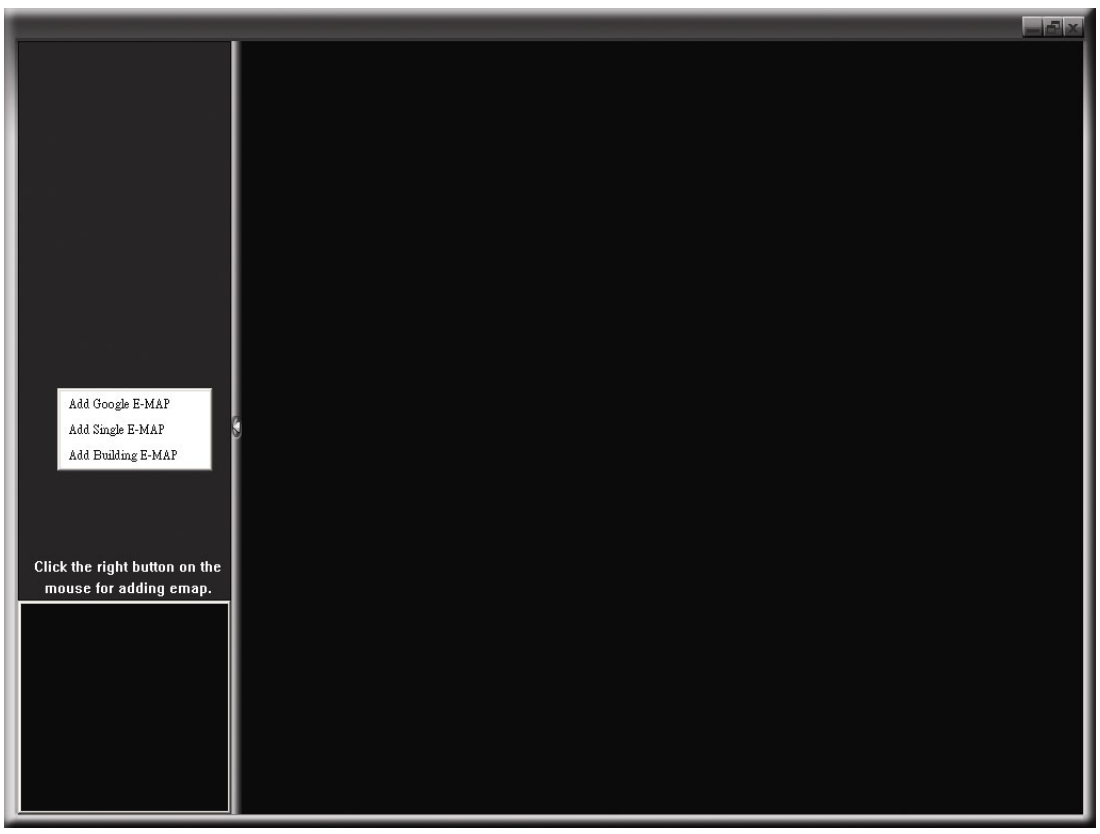
**Note:** Before using this function, make sure Video Viewer is connected to all the devices (up to 16) you want to monitor.

E-Map is **ONLY** available when the control panel is switch to the full function version.

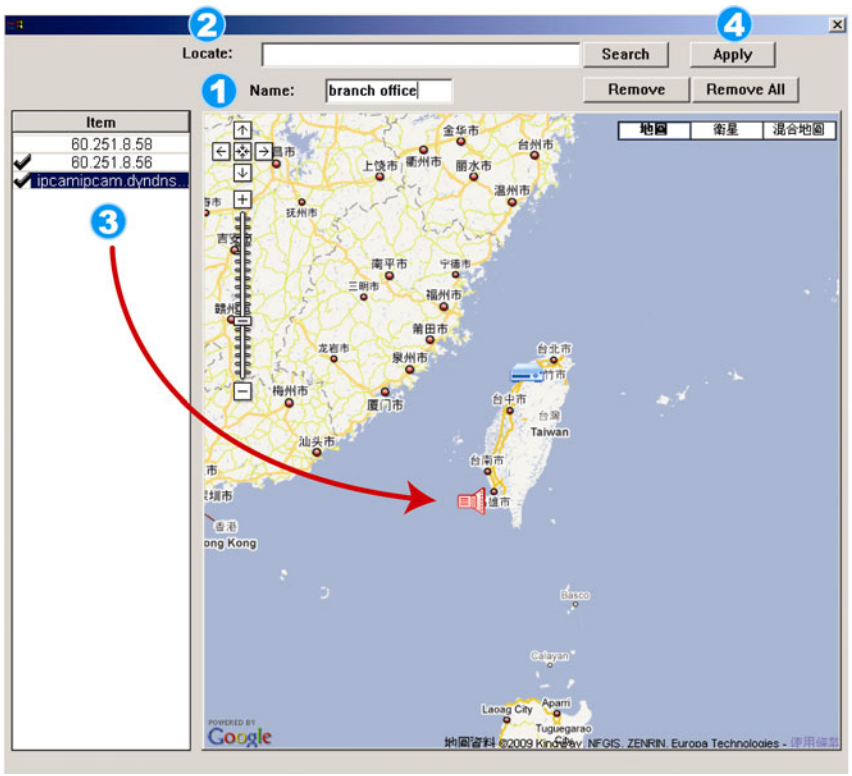
How to Add an E-Map Group

STEP1: In the simplified version, click “ ” to switch the control panel to the full function version, and click “ ” to enter the E-Map page as follows.

**Note:** To know where the buttons are, please refer to “Simplified Version (Default) at page 20, and “Full Function Version” at page 21.

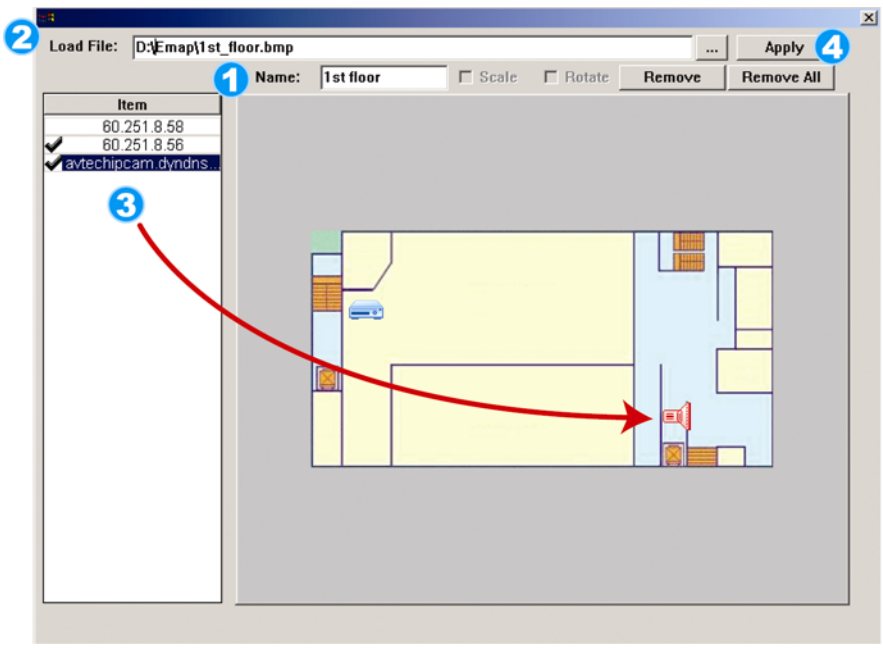



STEP2: Right-click to show the shortcut menu on the top-left panel, and select the E-Map group you want to add. There are three E-Map groups you can add: Google E-MAP, Single E-MAP, and Building E-MAP.



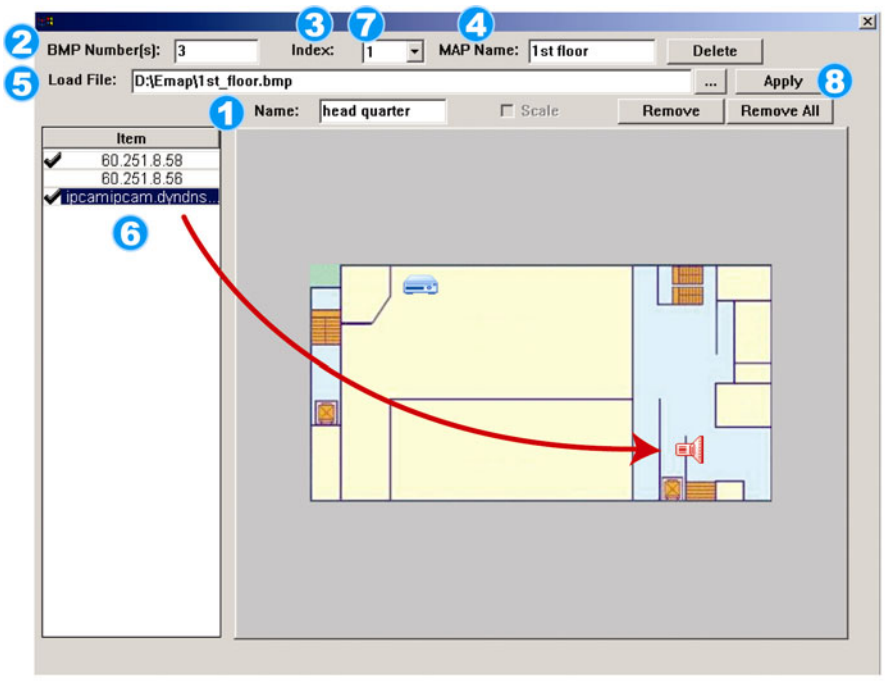

## How to add a Google E-Map group:

1. Enter the name of this Google E-Map group.
2. Enter a specific address or landmark, and click “Search”.
   OR
   Move to the map and drag to the location you want.
3. Click and drag the IP address to where it’s located in the current level.
4. Click “Apply” to save and finish.




## How to add a single E-Map group:

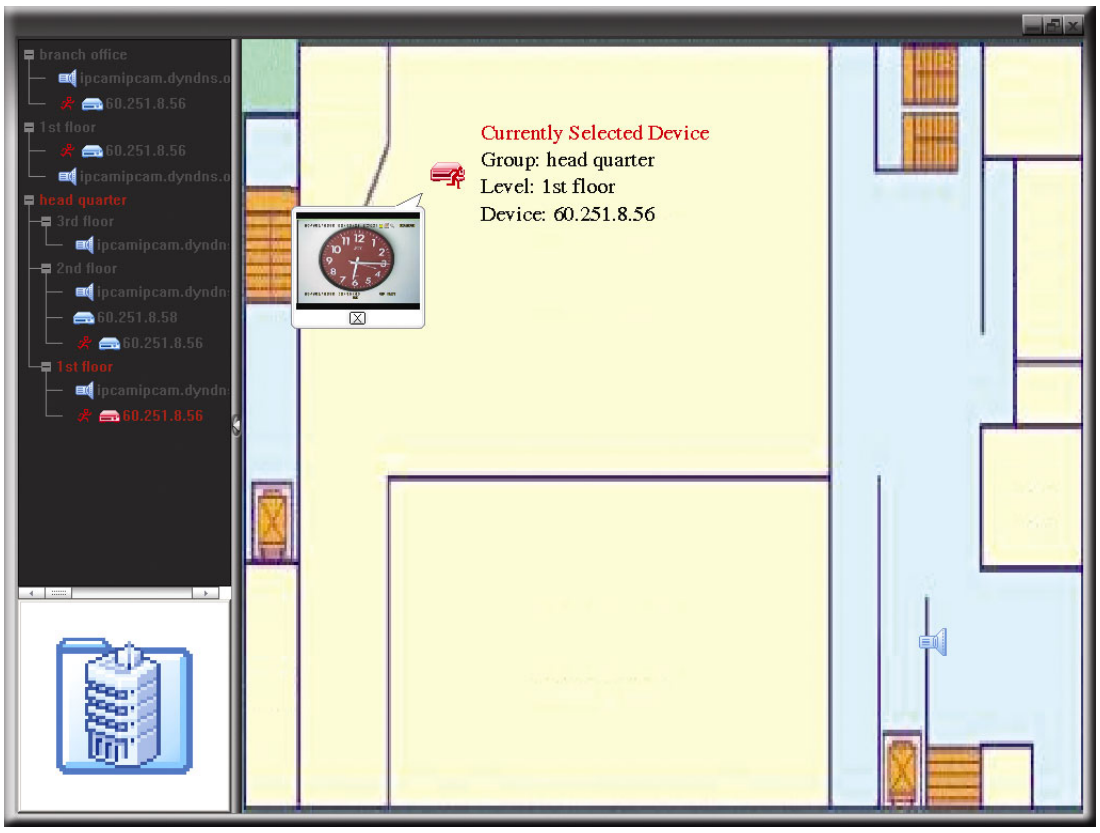
1. Enter the name of this single E-Map group.
2. Click “...” to browse the map file in BMP or JPEG.
3. Click and drag the IP address to where it’s located in the current level.
4. Click “Apply” to save and finish.




## How to add a building E-Map group:

1. Enter the name of this building E-Map group.
2. Enter the total levels of this building.
3. Select the level of the building from the drop-down list.
4. Enter the name of the level.
5. Click “...” to browse the map file in BMP or JPEG.
6. Click and drag the IP address to where it’s located in the current level.
7. Go back to STEP 3 to select other level of the building, and repeat from STEP 3 to 6 until the setup for all levels are finished.
8. Click “Apply” to save and finish.

STEP3: When the E-Map group is created, you will see the tree on the top-left panel, showing all the devices you've added to this group.



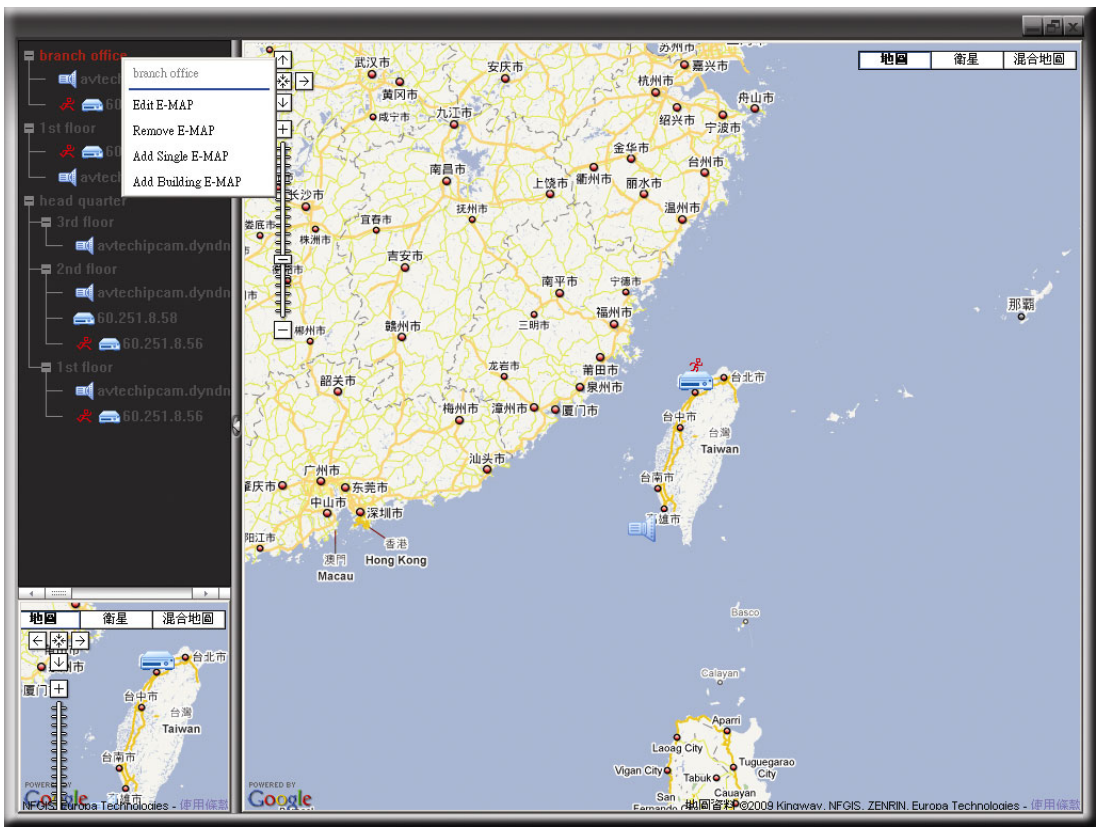

| Icon | Description |
|---|---|
| | The connected device is camera. When it's selected, it will become red. |
| | The connected device is DVR. When it's selected, it will become red. |
| | For any motion or alarm event, it will appear on the screen to catch your attention.<br>To know what's happening quickly, double-click the device icon on the E-Map to show the live view. |

## How to Edit / Remove an Existing E-Map Group

➢ For Google E-Map Group

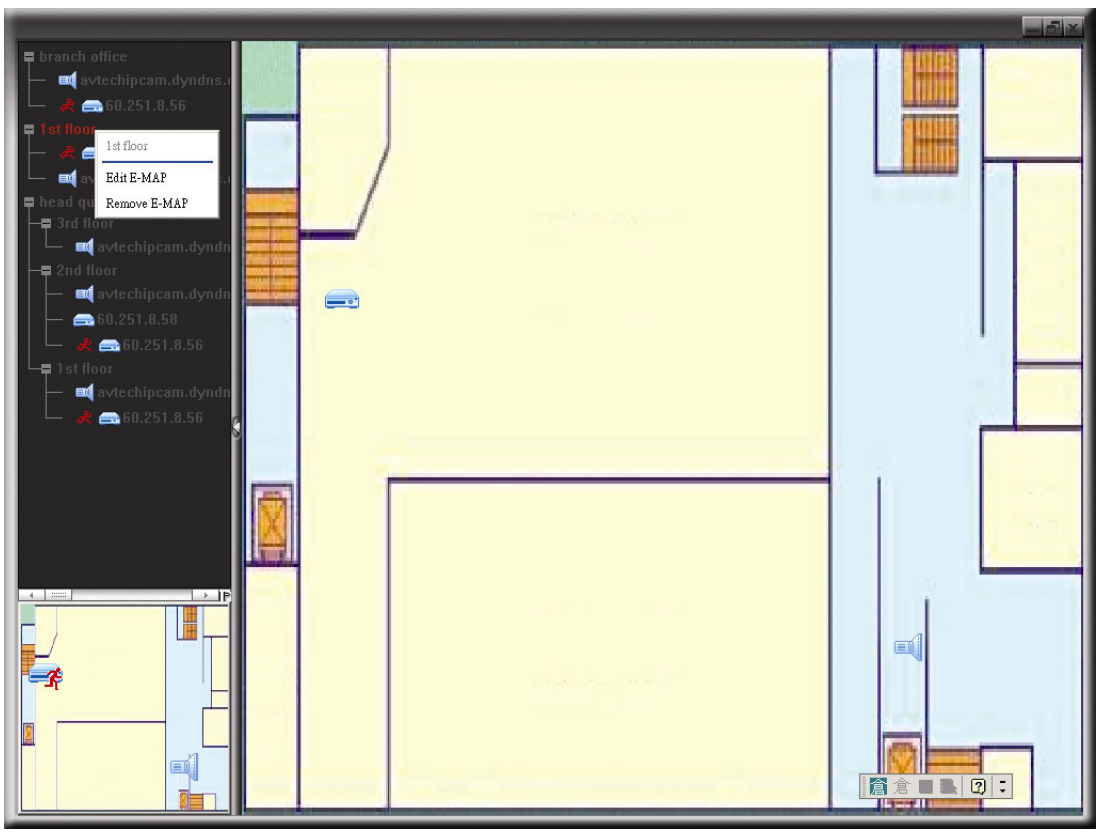
Right-click on the group name to show the shortcut menu list, and select "Edit E-MAP" or "Remove E-MAP" as needed.

You can also add a single E-Map group (Add Single E-MAP) or Building E-Map group (Add Building E-MAP) into the existing Google E-Map group.



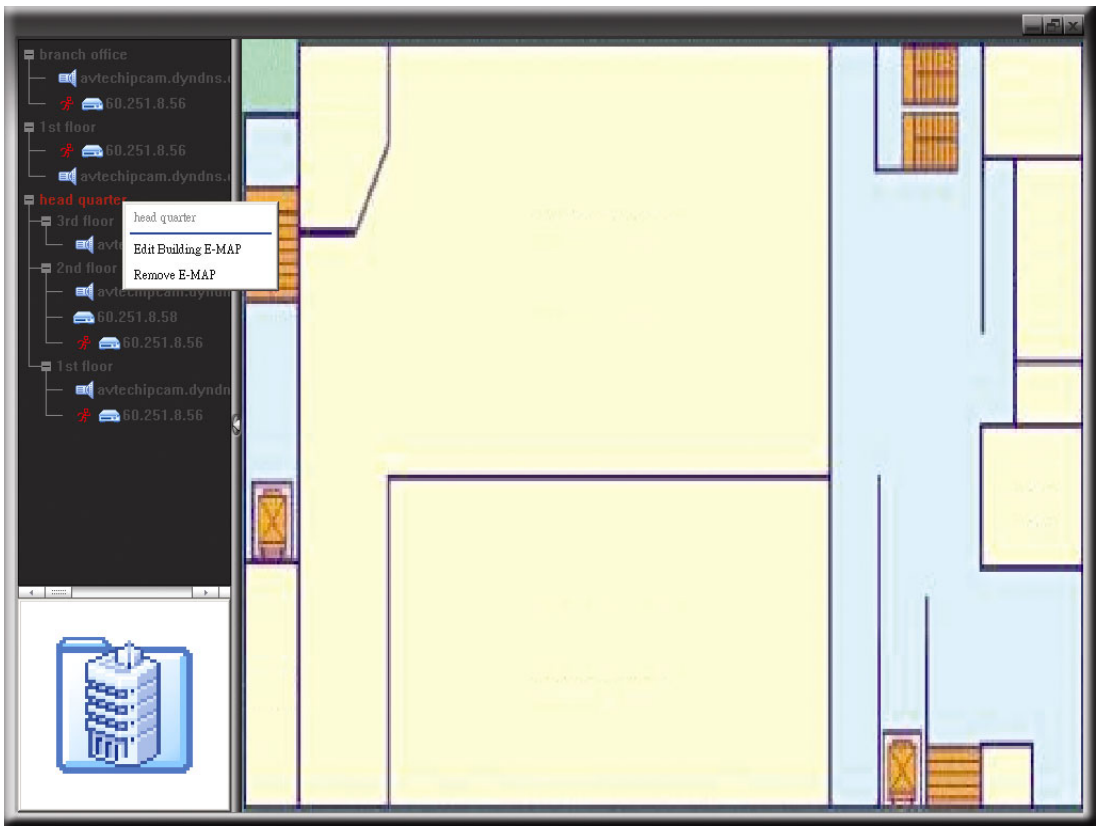
➢ For Single E-Map Group

Right-click on the group name to show the shortcut menu list, and select “Edit E-MAP” or “Remove E-MAP” as needed.




➢ For Building E-Map Group

Right-click on the group name to show the shortcut menu list, and select “Edit Building E-MAP” or “Remove E-MAP” as needed.



To edit or remove a certain level of the building E-Map group, right click on the level name, and select “Edit E-MAP” or “Remove E-MAP” as needed.

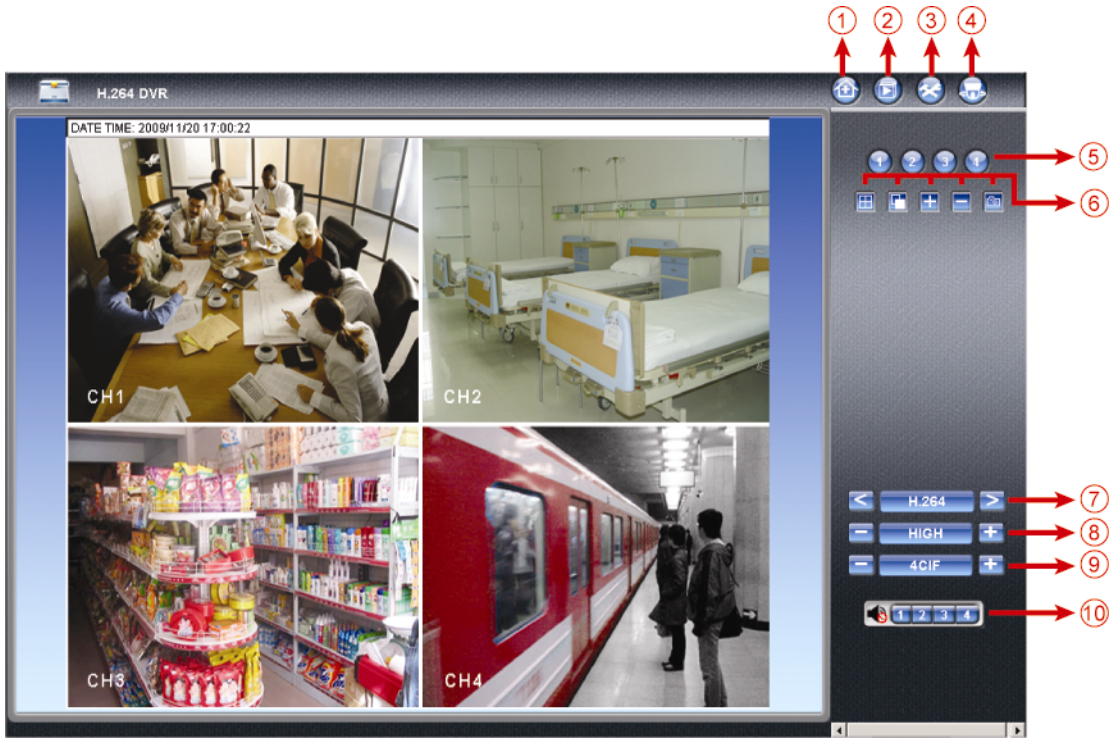
## 6.2 IE Web Browser

You can view the images or operate your DVR with IE web browser.

**Note:** The supported PC operation systems are Windows 7, Vista, XP and 2000.

Step 1: Key in the IP address used by your DVR in the URL address box, such as 60.121.46.236, and press Enter. You will be prompted to enter the user name and password to access the DVR.
If the port number your DVR used is NOT 80, you need to key in the port number additionally. The format is ***ipaddress*:*portnum***. For example, for IP address 60.121.46.236 and port No. 888, please key in "http://60.121.46.236:888" into the URL address box, and press "Enter".

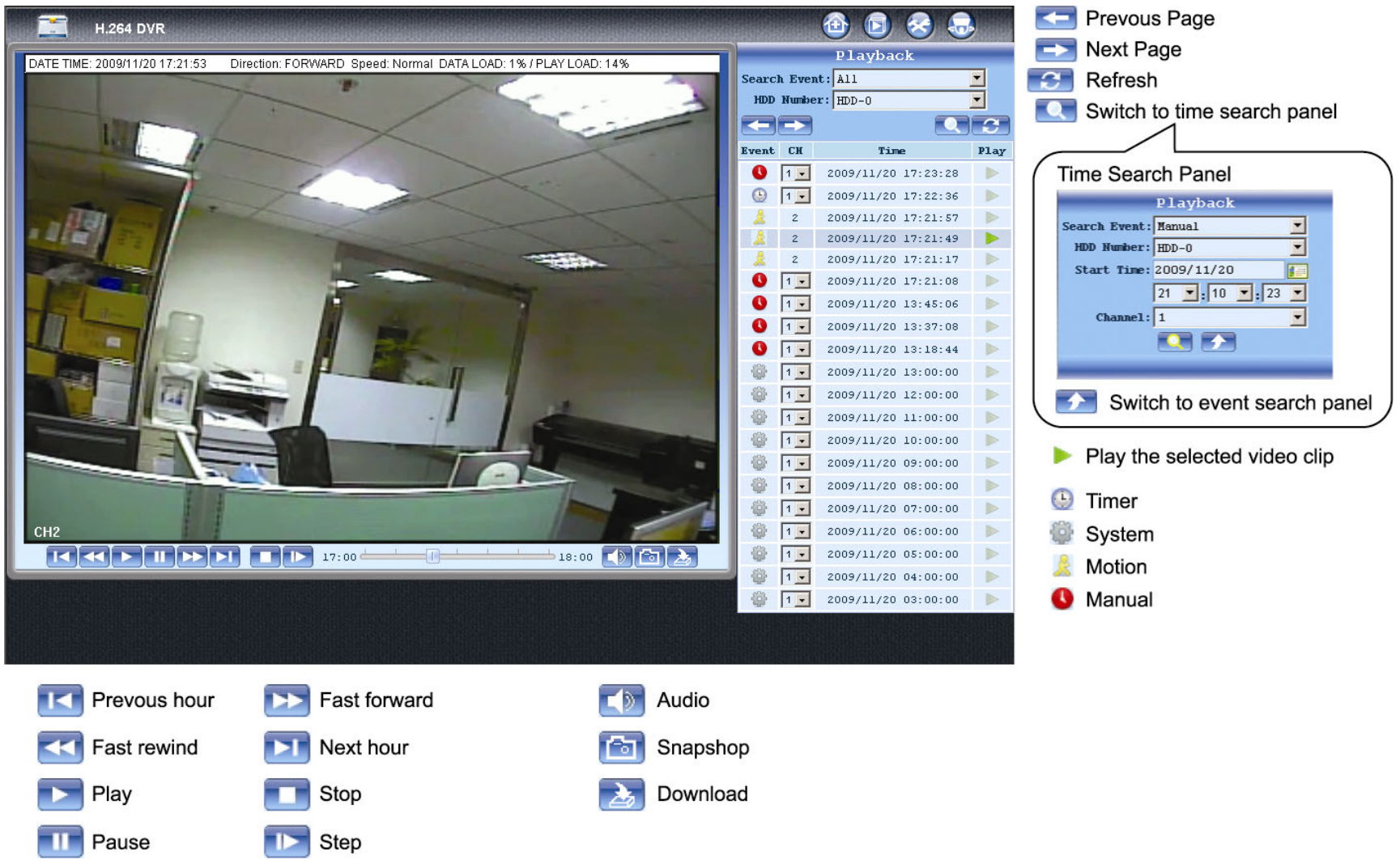
Step 2: Enter the user name and password, the same as the ones used for video viewer login, and click "OK". You will see a similar screen as the following when the login information is correct.




| NO. | Function | Description |
|---|---|---|
| 1 | Home | Click to go to the main page of the DVR. |
| 2 | Playback | Click " " to enter the playback panel where you can search or select the event you want to play and download to your PC simultaneously. For details, please refer to "6.2.1 Event Playback & Download" at page 30. |
| 3 | Config. | Click to go to the detailed DVR setting. |
| 4 | PTZ | Click to enter the PTZ mode. |
| 5 | Channel Selection | 1 2 3 4<br>Click one of the number to switch to the channel you want to see in full screen. |
| 6 | Display Mode | : Click to show 4-cut display.<br>: Click to display each channel one by one, starting from CH1. When the last channel is displayed, it will start from CH1 again.<br>To exit from this display mode, press any other channel display button. |
| | Selection | Click or to go to the previous / next channel, or change setting. |
| | Snapshot | Click to take a snapshot of the current view, and save it to the specified path in your PC set in " " → "General". |
| 7 | Web Transmission | **H.264 / QuickTime**<br>QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed in you operation system first. When "QuickTime" is selected, you will be promoted to enter the user name and password to access the server of the DVR. |
| 8 | Change Quality | **BEST / HIGH / NORMAL / BASIC**<br>Click to change the image quality. |

| NO. | Function | Description |
|---|---|---|
| 9 | Change Resolution | **4 CIF / CIF**<br>Click to change the image resolution (4CIF: 704*480 / CIF: 352*240) |
| 10 | Audio Channel Selection | <br>Select the audio channel you want for listening to the live audio.<br>**Note:** Your camera must support audio recording, and connect to the video channel which supports audio recording and the audio input of the DVR. For details, please refer to "1.3 Rear Panel" at page 2.<br> means mute.<br>To disable the mute status, click this icon again and select the audio channel you want. |

## 6.2.1 Event Playback & Download




| | | |
|---|---|---|
| / | Previous / Next Hour | Click to jump to the next / previous time interval in an hour, for example, 11:00 ~ 12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded during this whole hour. |
| | Fast Forward | Increase the speed for fast forward. Click once to get 4X speed forward and click twice to get 8X speed, etc., and the maximum speed is 32X. |
| | Fast Rewind | Increase the speed for fast rewind. Click once to get 4X speed rewind and click twice to get 8X speed, etc., and the maximum speed is 32X. |
| | Play | Click to play the current video clip. |
| | Pause | Click to pause the video playback. |
| | Stop | Click to stop the video playback. |
| | Step | In the pause mode, click to get one frame forward. |
| | Audio | Click to mute the playback if necessary, and click again to restore.<br>**Note:** Audio is available when your camera supports audio recording, and connects to the video channel which supports audio recording and the audio input of the DVR. For details, please refer to "1.3 Rear Panel" at page 2. |
| | Snapshot | Click to take a snapshot of the current view, and save it to the specified path in your PC set in "" → "General". |
| | Download | Click to download the current video clip to the specified path in your PC. |

# APPENDIX 1 SPECIFICATIONS

| | | |
|---|---|---|
| Video System | | NTSC / PAL (auto detection) |
| Video Compression Format | | H.264 |
| Video Input<br>(composite video signal 1 Vp-p 75Ω BNC) | | 4 channels |
| Video Output (BNC) | | Main Monitor: For stable display |
| Audio Input / Output | | 4 audio inputs, 1 audio output (Mono) |
| Maximum Recording Rate | Frame | 704×480 pixels with 30 IPS <NTSC> / 704×576 with 25 IPS <PAL> |
| Maximum Recording Rate | Field | 704×240 pixels with 60 IPS <NTSC> / 704×288 pixels with 50 IPS <PAL> |
| Maximum Recording Rate | CIF | 352×240 pixels with 120 IPS <NTSC> / 352×288 pixels with100 IPS <PAL> |
| Image Quality Setting | | SUPER BEST / BEST / HIGH /NORMAL |
| Hard Disk Storage | | Accommodates 1 SATA HDD (capacity up to 2TB) |
| Quick Search | | Time / Motion / Alarm search mode |
| SATA Interface | | Built-in |
| VGA Interface | | Built-in |
| Recording Mode | | Manual / Timer / Motion / Alarm / Remote |
| Multiplex Operation | | Live display / record / playback / backup / network operations |
| USB Mouse Control | | YES |
| Motion Detection Area | | 16 × 12 grids per camera for all channels |
| Motion Detection Sensitivity | | 3 adjustable parameters for accurate detection |
| Pre-alarm Recording | | YES |
| Backup Device | | USB 2.0 flash drive / Network |
| Web Transmitting Compression Format | | H.264 |
| Ethernet | | 10/100 Base-T. Supports remote control and live view via Ethernet |
| Web Interface | | Supports licensed software “Video Viewer” / Internet Explorer & Mozilla Firefox web browsers / QuickTime player (5 users access simultaneously) |
| | | *Operating System: Windows 7 / Vista / XP / 2000 |
| Network Protocol | | TCP/IP, PPPOE, DHCP and DDNS |
| Fully Remote Independent Operation | | YES |
| Event Notification | | By FTP / E-Mail |
| IR Remote Control | | YES (IR receiver built-in) |
| Mobile Surveillance | | YES (including iPhone, BlackBerry & WinCE) |
| Picture Zoom | | 2X digital zoom |
| PTZ Control | | YES |
| Alarm I/O | | 4 inputs, 1 output |
| Key Lock (Password Protection) | | YES |
| Local User Level | | Administrator & Operator |
| Video Loss Detection | | YES |
| Camera Title | | Supports up to 6 letters |
| Video Adjustable | | Hue / Saturation / Contrast / Brightness |
| Date Display Format | | YY/MM/DD, DD/MM/YY & MM/DD/YY |
| Daylight Saving | | YES |
| Power Source (±10%) | | DC 19V |
| Power Consumption (±10%) | | < 42 W |
| Operating Temperature | | 10℃ ~ 40℃ (50℉~104℉) |
| Dimensions (mm)** | | 343(W) × 59(H) × 223(D) |
| System Recovery | | System auto recovery after power failure |
| Optional Peripherals | | Keyboard controller |

* The specifications are subject to change without notice.
** Dimensional Tolerance: ±5mm

# APPENDIX 2 COMPATIBLE USB FLASH DRIVE LIST

Please upgrade the firmware of the DVR to the latest version to ensure the accuracy of the following table. If the USB flash drive is not supported by the DVR, the “USB ERROR” message will be shown on the screen.

**Note:** Please use your PC to format the USB flash drive as “FAT32”.

**Note:** You can backup up to 2GB video data for one-time USB backup. To backup more data, please set the time & channel(s) you want, and start USB backup again.

| MANUFACTURER | MODEL | CAPACITY |
|---|---|---|
| Transcend | JFV35 | 4G |
| | JFV30 | 8G |
| Kingston | DataTraveler | 1G |
| PQI | U172P | 4G |
| Apacer | AH320 | 2GB |
| | AH320A | 8GB |
| | AH220 | 1GB |
| | AH320 | 4GB |
| A-data | RB-18 | 1GB |
| Sandisk | Cruzer Micro | 2G |
| | Cruzer Micro | 4G |
| | Cruzer4-pk | 2G |
| Netac | U208 | 1G |
| MSI | F200 | 4G |
| SONY | Micro Vault Tiny 2G | 2G |
| | Micro Vault Tiny 4G | 4G |
| | Micro Vault Tiny | 1G |

# APPENDIX 3 COMPATIBLE SATA HDD LIST

Please upgrade the firmware of the DVR to the latest version to ensure the accuracy of the following table.

| MANUFACTURER | MODEL | CAPACITY | ROTATION |
|---|---|---|---|
| Seagate | ST3320613AS | 320GB | 7200 rpm |
| | ST33500320AS | 500GB | 7200 rpm |
| | ST3750330AS | 750GB | 7200 rpm |
| | ST31000340AS | 1000GB | 7200 rpm |
| WD | WD3200AAKS | 320GB | 7200 rpm |
| | WD5000AACS | 500GB | 7200 rpm |
| | WD6400AAKS | 640GB | 7200 rpm |
| | WD7500AAKS | 750GB | 7200 rpm |
| | WD10EADS | 1TB | 7200 rpm |
| | WD15EADS | 1.5TB | 7200 rpm |
| | WD20EADS | 2TB | 7200 rpm |
| Maxtor | STM3500320AS | 500GB | 7200 rpm |
| | STM3750330AS | 750GB | 7200 rpm |
| HITACHI | HDT725032VLA360 | 320GB | 7200 rpm |
| | HDS721010KLA330 | 1000GB | 7200 rpm |

# APPENDIX 4 MAIN MENU STRUCTURE

| | | | |
|---|---|---|---|
| | QUICK START | GENERAL | CHANNEL TITLE |
| | | | EVENT STATUS |
| | | | DATE DISPLAY |
| | | | IMAGE SIZE |
| | | | QUALITY |
| | | | IMAGE PER SECOND |
| | | TIME SETUP | DATE |
| | | | TIME |
| | DATE SETUP | DATE INFO | DISPLAY DATE OF MODE |
| | | | FORMAT |
| | | DAYLIGHT | DAYLIGHT SAVING |
| | SYSTEM | TOOLS | LANGUAGE |
| | | | ADMIN PASSWORD |
| | | | OPERATOR PASSWORD |
| | | | UPGRADE |
| | | | BACKUP |
| | | SYSTEM INFO | BAUD RATE |
| | | | HOST ID |
| | | | AUTO KEY LOCK |
| | | | CLEAR HDD |
| | | | RESET DEFAULT |
| | | | REMOTE CONTROL ID |
| | | | SERIAL TYPE |
| | | | VIDEO FORMAT |
| | | | VERSION |
| | EVENT INFORMATION | QUICK SEARCH | |
| | | EVENT SEARCH | |
| | | HDD INFO | |
| | | EVENT LOG | |
| | ADVANCE CONFIG | CAMERA | BRIGHTNESS |
| | | | CONTRAST |
| | | | SATURATION |
| | | | HUE |
| | | | COV. |
| | | | REC |
| | | | CHANNEL TITLE |
| | | DETECTION | LS |
| | | | SS |
| | | | TS |
| | | | DET |
| | | | ALARM |
| | | | AREA |
| | | ALERT | EXT. ALERT |
| | | | INT. BUZZER |
| | | | KEY BUZZER |
| | | | VLOSS BUZZER |
| | | | MOTION BUZZER |
| | | | ALARM BUZZER |
| | | | HDD BUZZER |
| | | | ALARM DURATION (SEC) |
| | | | HDD NEARLY FULL (GB) |
| | | NETWORK | |
| | | SNTP | GMT |
| | | | NTP SERVER |
| | | | SYNC PERIOD |
| | | DISPLAY | SCREEN DWELL DURATION |
| | | | VGA OUTPUT |
| | | | DISPLAY COVERT |
| | | | HDD DISPLAY MODE |
| | | | DISPLAY OUTPUT PATH |
| | | | ALPHA BLENDING |
| | | RECORD | MANUAL RECORD ENABLE |
| | | | EVENT RECORD ENABLE |
| | | | TIMER RECORD ENABLE |
| | | | EVENT RECORD IPS |
| | | | TIMER RECORD IPS |
| | | | PRE-ALARM RECORD |
| | | | OVERWRITE |
| | | | EVENT RECORD ALL CHANNEL |
| | | | KEEP DATA LIMIT (DAYS) |
| | | REMOTE | |
| | SCHEDULE SETTING | RECORD | |
| | | DETECTION | |

# APPENDIX 5 DVR BATTERY REPLACEMENT

DVR time reset after power failure, for example, caused by a power outage, will cause the disorder of the recorded data, and users may have problems in searching the event clip they want. To keep the DVR time from resetting, a non-chargeable lithium battery, *CR2032*, is installed in the DVR.

However, the DVR time might still get reset when the DVR battery is low or even running out of power. If so, please replace the DVR battery, CR2032, **right away** as instructed below.

➢ **How to replace CR2032**

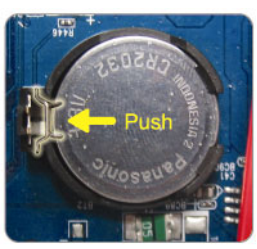
**Note:** The lithium battery, CR2032, is a non-chargeable battery, and should be purchased separately. Please replace only with the same or equivalent type battery in case of danger.

Step1: Stop all DVR recording **immediately** to prevent the disorder of the recorded data. Then, back up the recorded data if necessary.

Step2: Power off the DVR, and disconnect the DVR power.

Step3: Remove the DVR cover, and find the battery on the mainboard.

Step4: Push the release as indicated below to remove the battery.




Step5: Get a new battery with the side of “CR2032” facing up, and install it to the mainboard.

Step6: Replace the DVR cover and connect to power.

Step7: Set DVR date & time, and resume recording. For details, please refer to “2.4 Date and Time Setting” at page 5, and “5.2 Record” at page 12.

# H.264 數位錄放影機

# 使用說明書

支援圖形化介面與 **USB** 滑鼠控制

在使用本機前請務必詳細閱讀安全須知及操作說明，並保存此手冊以備後續參考。

產品畫面顯示與操作請以實機爲主。

# 安全須知

| | 注意 | |
|---|---|---|
| | **RISK OF ELECTRIC SHOCK** | |

**注意：**

爲減低觸電的可能性，請勿讓此機器暴露在雨中或潮濕的環境下。請務必使用適當的變壓器。本公司不負責賠償任何因不當使用本產品所引起的損害。即使本公司已被告知可能的相關風險，使用者仍應自行承擔不當使用所產生之後果。

此符號用於警告使用者 產品機殼內部有“危險電壓”，觸碰有可能會造成觸電的可能性。.

此符號用於告知使用者此機器附有操作與維護指示的重要文件。

本公提供的所有無鉛產品皆符合歐盟有害物質使用限制指引 (Restriction of Hazardous Substances, (RoHS))，意即本公司的生產流程與產品均嚴格遵守無鉛守則，而且不包含該指引內提供的任何有害物質。

此劃叉的滾輪垃圾筒圖示代表在歐盟境內，本產品於丟棄時必須另行收集。此原則適用於您的產品與任何標有此圖示的週邊設備。請勿隨意丟棄這些產品。請洽詢您當地的經銷商，以得知回收此設備的程序。

此機器的製造符合無線電波干擾的規範。

### *免責聲明*

本說明書資訊在付梓時都是最新的。本公司保留可隨時修改或刪除說明書內容的任何權利。本公司不保證此說明書的內容完全無誤、完整或實用性。產品畫面顯示與操作請以實機爲主。此說明書內容更改以實際產品爲準，將不另行通知。

在此提及的產品與公司名稱，也許爲其各自擁有者的註冊商標或商稱名稱。

### *接地*

此爲符合 Safety Class 1 Product (隨附的電源插頭有內建接地線) 的產品，其主電源插頭應插入支援接地線的三孔電源插座。任何破壞接地保護的舉動都可能會使得本產品具有危險性。因此，請勿刻意破壞接地保護。

### *遠離有水或潮溼的環境*

請勿讓本產品曝露在任何有水或潮溼的環境下，例如將水瓶放在本產品上，或者容易滴到雨水的窗戶邊。

### ***MPEG4** 授權*

THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD (“MPEG-4 VIDEO”) AND/OR (ii) DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG-4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE HTTP://WWW.MPEGLA.COM.

### ***GPL** 授權*

This product contains codes which are developed by Third-Party-Companies and which are subject to the GNU General Public License (“GPL”) or the GNU Lesser Public License (“LGPL”).

The GPL Code used in this product is released without warranty and is subject to the copyright of the corresponding author.

Further source codes which are subject to the GPL-licenses are available upon request.

We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

ftp://ftp.dvrtw.com.tw/GPL/AV074/

### *版本*

韌體：1142-1039-1013-10260A-0000

# 目錄


**1. 開始使用之前 ..... 1**

1.1 包裝明細 ..... 1
1.2 前面板 ..... 1
1.3 背板 ..... 2

**2. 連接與設定 ..... 3**

2.1 SATA 硬碟安裝 ..... 3
2.2 攝影機連接 ..... 4
2.2.1 一般攝影機連接 ..... 4
2.2.2 PTZ 攝影機連接 ..... 4
2.3 DVR 開機 ..... 5
2.4 日期與時間設定 ..... 5
2.5 清除硬碟資料 ..... 6
2.6 密碼設定 ..... 6

**3. 圖形化介面與 USB 滑鼠控制簡介 ..... 7**

3.1 連接 USB 滑鼠 ..... 7
3.2 快速選單列 ..... 7
3.2.1 頻道切換 ..... 7
3.2.2 PTZ 控制面板 ..... 8
3.3 主目錄選單 ..... 8

**4. 基本操作 ..... 9**

4.1 即時畫面 ..... 9
4.2 錄影圖示 ..... 9
4.3 影像回放 ..... 9
4.3.1 回放操作 ..... 10
4.3.2 事件搜尋 ..... 10
4.3.3 錄音回放 ..... 10
4.4 切換使用權限 ..... 10
4.5 影像輸出切換 ..... 10

**5. 常用功能 ..... 12**

5.1 快速搜尋 ..... 12
5.2 錄影設定 ..... 12
5.2.1 錄影快速設定 ..... 12
5.2.2 錄影詳細設定 ..... 12
5.3 預約設定 ..... 13
5.3.1 預約錄影 ..... 13
5.3.2 預約偵測錄影 ..... 14
5.4 偵測設定 ..... 14
5.5 PTZ 攝影機設定 ..... 15
5.6 系統設定 ..... 16
5.6.1 密碼設定 ..... 16
5.6.2 系統更新 ..... 16
5.6.3 影像備份 ..... 16
5.6.4 清除所有硬碟資料 ..... 17
5.7 網路設定 ..... 18

**6. 遠端操作 ..... 19**

6.1 免費授權軟體 ..... 19
6.1.1 軟體安裝 & 網路連線 ..... 19
6.1.2 控制面板簡介 ..... 20
6.1.3. 常用功能 ..... 22
6.1.4. E-Map ..... 23
6.2 IE 網路瀏覽器 ..... 29
6.2.1 事件回放與下載 ..... 30

**附錄 1 產品規格 ..... 31**

**附錄 2 相容 USB 隨身碟品牌 ..... 32**

**附錄 3 相容 SATA 硬碟表 ..... 33**

**附錄 4 主目錄選單架構 ..... 34**

**附錄 5 更換 DVR 電池 ..... 35**

# 1. 開始使用之前

## 1.1 包裝明細

- ☐ 數位錄放主機
- ☐ 硬碟螺絲
- ☐ IR 紅外線遙控器
- ☐ IR 紅外線遙控器說明書
- ☐ CD 說明書
- ☐ 變壓器和電源線

## 1.2 前面板

1) LED 顯示燈

HDD 硬碟正在讀取資料或錄影中。

已觸發警報。

已啓動預約錄影。

DVR 處於回放模式下。

DVR 已開機。

2) II (▲) / ■ (▼) / ◄◄ (◄) / ►► (►)

按 ▲ / ▼ / ◄ / ► 上 / 下 / 左 / 右移動。

在回放模式下：

按 II 暫停回放。

按 ■ 停止回放。

按 ►► 快轉。

按 ◄◄ 倒轉。

3) MENU (目錄選單)

按 MENU 進入主目錄選單。

4) ENTER (輸入)

按 ENTER 確認設定。

5) LIST (事件搜尋)

按 LIST 可依事件快速搜尋錄影資料：錄影清單 / 位移事件清單 / 警報事件清單 / 時間清單，或者選擇全部事件清單顯示所有事件記錄。

若要進行時間搜尋，請選擇快速搜尋。設定想要的時間，然後選擇開始回放指定時間內的錄影資料。

6) PLAY (播放)

按 PLAY 立即回放最近一筆的錄影資料。

7) SLOW (慢速回放)

在回放模式下，按 SLOW 進行慢速回放。

8) ZOOM (數位變焦)

按 ZOOM 在 FRAME 或 FIELD 錄影模式下放大選取頻道的畫面。

9) SEQ (全螢幕跳台顯示)

按 SEQ 依序全螢幕顯示每個頻道，從 CH1 開始。顯示最後一個頻道後，就會從 CH1 開始從頭再來。若要結束此模式，請再按一次 SEQ。

10) ⊞

按此鍵可顯示 4 分割頻道顯示模式。

11) CH1 ~ 4

按頻道編號選取想要全螢幕顯示的頻道。

12) SEARCH (搜尋)

按 SEARCH 進入時間搜尋清單。設定想要的時間，然後選擇開始回放指定時間內的錄影資料。

13) AUDIO (SLOW + ZOOM)

按 SLOW + ZOOM 選取即時聲音頻道或錄音頻道。

| | | | |
|---|---|---|---|
| 即時聲音頻道 1~4 (以白色顯示) | | 錄音回放頻道 1~4 (以黃色顯示) | |
| 未選取任何聲音頻道 | | | |

14) P.T.Z. (⊞ + SEQ)

同時按住⊞ + SEQ 可進入 / 跳出 PTZ 控制模式。

15) USB 埠

前面板有內建兩個 USB 埠，可用來連接 USB 滑鼠進行 DVR 操作，或者連接 USB 隨身碟進行影像備份。

**註：** 前面板的 USB 埠不得同時連接兩隻 USB 滑鼠或兩台 USB 隨身碟。

如需得知相容 USB 隨身碟列表，請參閱第 32 頁的「附錄 2 相容 USB 隨身碟品牌」。

## 1.3 背板

1) VIDEO IN (1 ~ 4)：連接攝影機的影像接頭。

**註：** DVR 會自動偵測攝影機的影像系統，所以請務必先將攝影機接妥並上電，再將 DVR 上電。

2) AUDIO IN (1~4)

連接攝影機的聲音接頭 (若攝影機支援錄音的話)。

**註：** 要備份影音資料，請先確認攝影機有支援收音功能，並連接到正確的影像頻道和聲音頻道。例如，聲音頻道 1 的聲音資料會與影像頻道 1 的影像資料錄在一起。

3) AUDIO OUT

連接到單聲道輸出的擴音器。

4) MONITOR

連接 CRT 螢幕之用。

**註：** 若 MONITOR 和 VGA 都接了螢幕，在 DVR 開機時按面板左鍵◀可強制藉由 MONITOR 進行影像輸出。詳情請參閱第 7 頁的「3.2.1 頻道切換」。

5) VGA

直接連接至 LCD 螢幕以輸出影像。

**註：** 若 MONITOR 和 VGA 都接了螢幕，在 DVR 開機時按面板右鍵▶可強制藉由 VGA 進行影像輸出。詳情請參閱第 7 頁的「3.2.1 頻道切換」。

6) EXTERNAL I/O

此埠是用來連接外部設備 (例如警報感應器等等)。

7) LAN

以網路線來連上網際網路。

8) DC 19V

連接到電源變壓器 (包裝盒內附)。

9) ⏻ 電源開關

切換到 ❙ 開機，切換到 O 關機。

# 2. 連接與設定

DVR 開機之前，請先確認是否已裝入硬碟，而且最少已接妥一隻攝影機。詳情請參閱以下說明。

**註：** DVR 會自動偵測連接攝影機的影像系統(NTSC 或 PAL)。爲確保系統偵測無誤，在 DVR 開機之前，請先確定攝影機已接到 DVR 並上電。

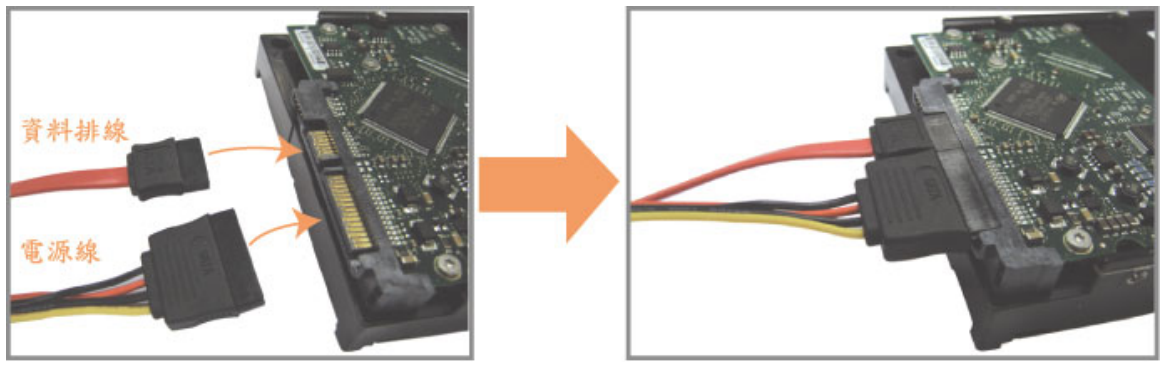
## 2.1 SATA 硬碟安裝

在 DVR 開機之前，請務必先安裝好 SATA 硬碟。

**註：** 在 DVR 初次開機並設定好日期和時間後，建議清除硬碟資料，以確保新的錄影資料不會與之前儲存在同顆硬碟的其他資料混在一起。詳情請參閱第 6 頁的「2.5 清除硬碟資料」。

步驟 1：鬆開 DVR 上蓋的螺絲，然後打開 DVR 上蓋。找到 DVR 內的硬碟支架。

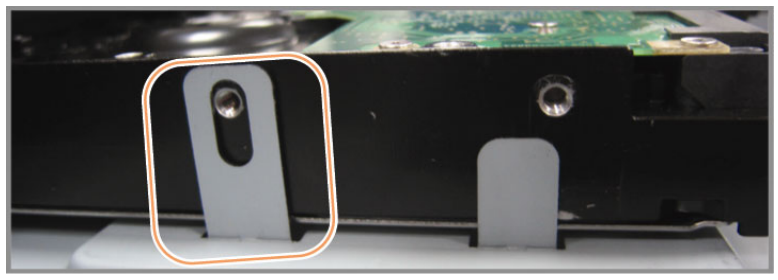
步驟 2：將相容硬碟連接到電源接頭和資料排線接頭。




步驟 3：將硬碟的 PCB 面朝上，然後再將硬碟放到支架中間，如下所示。

**確認硬碟另一面有接觸到 DVR 底座，以確保散熱無虞。**

步驟 4：將硬碟兩側的螺絲孔對準支架的螺絲孔 (如下所示)，然後使用隨附螺絲將硬碟鎖在支架上。



步驟 5：裝回 DVR 上蓋，然後鎖回在步驟 1 鬆開的所有螺絲。

## 2.2 攝影機連接

在 DVR 開機之前，請先接妥攝影機並上電。請使用指定的電源供應器連接攝影機。之後，再用同軸電纜或接好 BNC 接頭的 RCA 線，連接攝影機和 DVR 的影像插孔。

**註：** 關於 DVR 影像輸入埠的詳細資訊，請參閱第 2 頁的「1.3 背板」。

### 2.2.1 一般攝影機連接

**註：** 相關攝影機連接細節，請參閱其各自的使用說明書。

1) 連接 DVR 影像輸入埠

   用同軸電纜或接好 BNC 接頭的 RCA 線，連接攝影機和 DVR 的影像插孔。

2) 連接 DVR 音源輸入埠 (選用)

   用同軸電纜或接好 BNC 接頭的 RCA 線，連接攝影機和 DVR 的音源插孔。

3) 連接電源

   使用指定的電源供應器連接攝影機，並插入電源插座。

### 2.2.2 PTZ 攝影機連接

以下說明是以連接本公司自家 PTZ 攝影機爲例。

有關控制 PTZ 攝影機的 DVR 設定，請參閱第 15 頁的「5.5 PTZ 攝影機設定」。關於 PTZ 攝影機控制和操作的詳細資訊，請參閱其各自的使用說明書。

| **RJ11 線** |
| --- |
| RS485-A：**紅線** |
| RS485-B：**綠線** |
| |
| *RJ11 線並未隨附產品提供。* |

**步驟 1：取得一條長度適當的 RJ11 連接線。**

RJ11 連接線內的線路配置 (RS485-A / RS485-B) 可能會與此處所述不同。若您在連接後仍無法控制 DVR，請將線路交換連接試試。

**步驟 2：刮除 RJ11 連接線一端的絕緣膜。**

刮除 RJ11 連接線一端的絕緣膜並找出 RS485-A 和 RS485-B 線，然後把那兩條線的絕緣膜刮掉露出裸線。

**步驟 3：將 RJ-11 連接線和快速球攝影機的 RS485-A 和 RS485-B 線纏在一起。**

將 RJ11 連接線的紅線，與所有攝影機的 RS485-A 線纏在一起。然後，將 RJ11 連接線的綠線，與所有攝影機的 RS485-B 線纏在一起。使用絕緣膠帶將纏在一起的裸線包覆起來，以達到保護的效果。

**步驟 4：將 RJ11 接頭插入 DVR。**

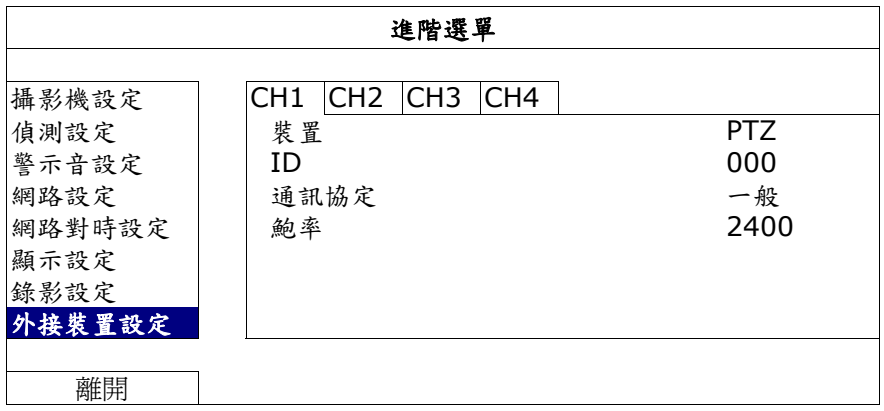
將 RJ11 連接線的 RS485-A (紅色) 和 RS485-B (綠色) 線焊到 D-Sub 接頭相對應的 PIN 腳上。

詳情請洽您的安裝商。

**步驟 5：在 DVR 進行快速球攝影機設定。**

進入進階選單 → 外接裝置設定來設定快速球攝影機。

a) 選擇 PTZ。
b) 設定 ID 值，此值必須與快速球攝影機本身設定的值相同。攝影機的預設 ID 爲 000。
c) 將通訊協定設爲一般。
d) 設定鮑率值，此值必須與快速球攝影機本身設定的值相同。攝影機的預設鮑率爲 2400。




## 2.3 DVR 開機

此設備操作必須使用製造者所標示的電源供應器類型。將指定的 AC 電源線接到變壓器，並將電源插頭插入電源插座。電源 LED 顯示燈會亮。

**註：** 在 DVR 開機之前，請先確認攝影機已接妥並上電，以確保攝影機影像系統偵測無誤。

**註：** 爲確保 DVR 可以持續正確運作，建議可視需要加上 UPS (不斷電系統) 較能保護好您的設備持續運作。UPS 爲選購配備。

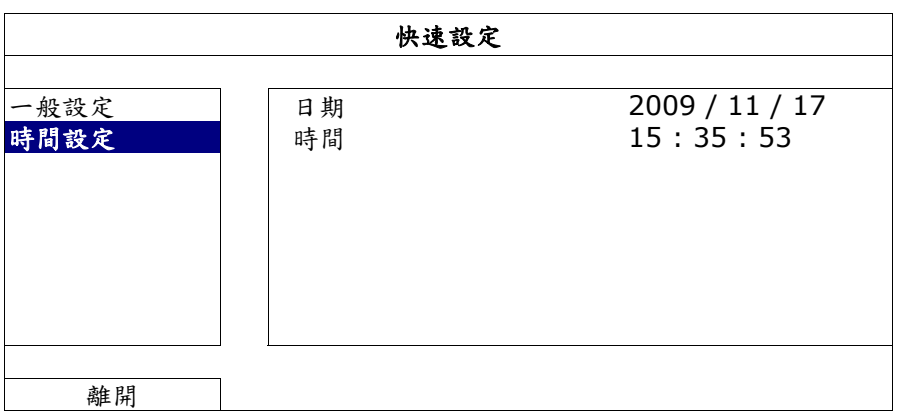
## 2.4 日期與時間設定

在操作 DVR 之前，請先設定 DVR 的日期與時間。

**註：** 請勿在錄影時修改日期和時間；否則，錄影資料會錯亂，而且無法依時間來搜尋想要備份的資料。若修改了日期和時間，建議先將硬碟資料清除後再重新錄影，以免造成錄影時間錯亂。

**註：**若爲初次使用 DVR，請在設定好日期與時間後，將 DVR 連續上電至少 48 小時。此舉可確保 DVR 時間在斷電後不會重設。若 DVR 時間在斷電 (例如：停電) 後重設，這是因爲 DVR 電池電量不足或已耗盡所致。請依第 35 頁的「附錄 5 更換 DVR 電池」說明來更換電池。

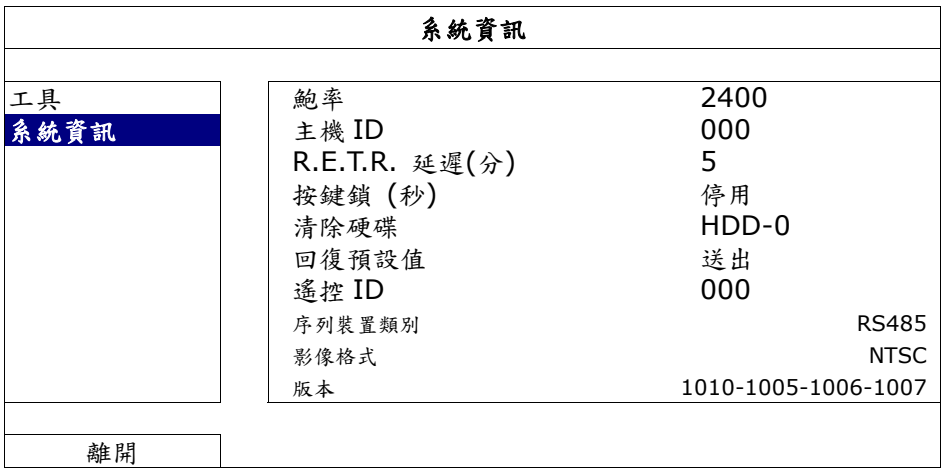
按右鍵跳出密碼輸入視窗來輸入 DVR 密碼。預設管理者密碼爲 0000。狀態會從 (按鍵上鎖) 切換成 (管理者)。然後按右鍵顯示主目錄選單，並選擇快速設定 → 時間設定來設定日期和時間。



## 2.5 清除硬碟資料

在 DVR 初次開機並設定好日期和時間後，建議清除硬碟資料，以確保新的錄影資料不會與之前儲存在同顆硬碟的其他資料混在一起。

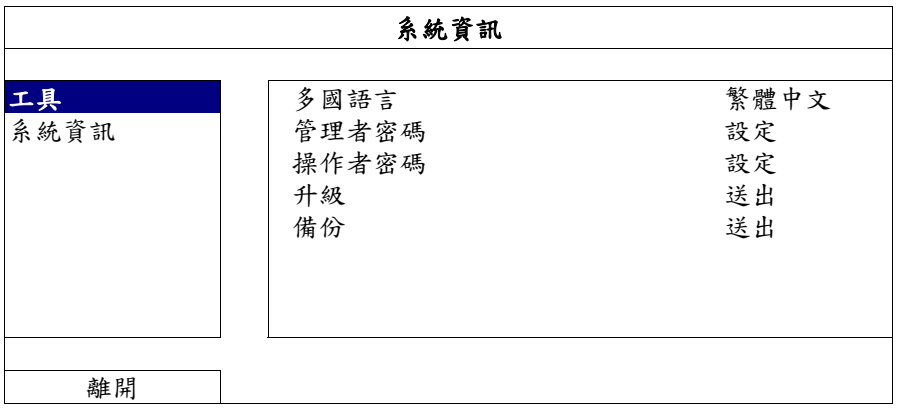
按右鍵顯示主目錄選單，然後選擇系統資訊 → 系統資訊 → 清除硬碟。硬碟資料清除後，DVR 會重新啓動。




## 2.6 密碼設定

按右鍵顯示主目錄選單，然後選擇系統資訊 → 工具來變更 DVR 密碼。

使用權限共有兩種：管理者和操作者。詳情請參閱第 10 頁的「4.4 切換使用權限」。



# 3. 圖形化介面與 USB 滑鼠控制簡介

## 3.1 連接 USB 滑鼠

將 USB 滑鼠插入 DVR 前面板的 USB 埠，然後等到螢幕出現滑鼠圖示 ( )，表示已正確偵測到 USB 滑鼠。

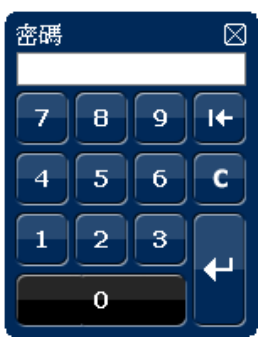
移動滑鼠即會出現密碼輸入視窗，要求你輸入 DVR 密碼。預設的管理者密碼爲 **0000**。輸入後，DVR 狀態會從 (上鎖) 變成 (管理者)，螢幕左側會出現快速選單列。

---

**註：** DVR 支援兩種使用者權限，使用者可以在主目錄選單的 **系統資訊** → **工具**裡進行設定。詳情請參閱第 16 頁的「5.6.1 密碼設定」。

---

**密碼輸入**




**快速選單列：收合**

**快速選單列：展開**

| | |
|---|---|
| CH | 顯示頻道切換面板，讓使用者選擇想要切換的頻道。詳情請參閱第 7 頁的「3.2.1 頻道切換」。 |
| | 顯示回放操作面板。按 回放最新一筆的錄影資料，或按 進入搜尋事件清單。詳情請參閱第 9 頁的「4.3 影像回放」。 |
| | 先切換到想要的頻道，然後再按 放大影像。在放大模式下，按住並拖曳螢幕左下角的紅框可移到想要查看的位置。若要退出此模式，請按 ☒。 |
| | 選取想要的聲音頻道。<br>在即時畫面下，只能選擇收聽即時聲音。<br>在回放模式下，可以選擇收聽即時聲音或錄音。 |
| | 進入 PTZ 模式並顯示 PTZ 攝影機控制面板。第 8 頁的「3.2.2 PTZ 控制面板」。 |

## 3.2 快速選單列

將滑鼠移到箭號即可展開快速選單列，顯示以下五種功能：

### 3.2.1 頻道切換

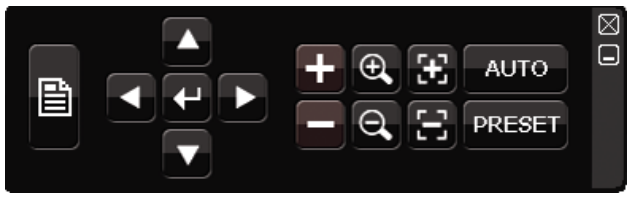
在快速選單列上按 CH 會顯示以下畫面：

| | | |
|---|---|---|
| 1 2 3 4 | 影像頻道 1~4 | 切換並全螢幕顯示想要的頻道。 |
| | 全螢幕跳台 | 依序全螢幕顯示每個頻道，從 CH1 開始。顯示最後一個頻道後，就會從 CH1 開始從頭再來。 |
| | 四分割跳台 | 按此鍵可顯示 4 分割頻道顯示模式。 |

### 3.2.2 PTZ 控制面板

**註：** 在 PTZ 控制模式下，DVR 有支援滑鼠 hot point 操作攝影機，只要在螢幕上點擊想要移動的目標位置，攝影機即會移到該位置。

在快速選單列上按 會顯示以下畫面：



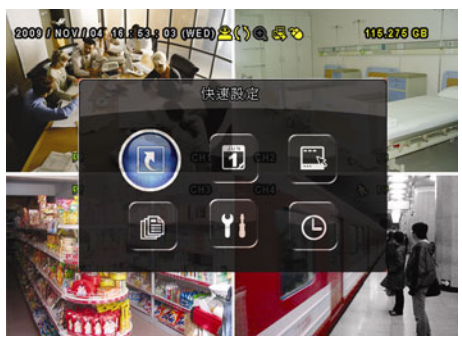

| | | |
|---|---|---|
| | 攝影機選單 | 進入 / 跳出攝影機目錄選單。<br>有關攝影機目錄選單的詳細資訊，請參閱其各自的使用說明書。 |
| | 輸入 / 確認 | 確認選取項目 / 進入選取目錄選單。 |
| / / / | 上 / 下 / 左 / 右 | 上下左右移動攝影機鏡頭，或者變更設定。 |
| / | 影像放到最大 /<br>恢復原始大小 | 按一下將影像放到最大 / 恢復影像原始大小。 |
| / | 影像放大 / 影像縮小 | 按一下放大 / 縮小影像。 |
| / | 近距離 / 遠距離對焦 | 按一下調整影像的焦距。 |
| AUTO | 自動模式 | 按一下啓動 PTZ 攝影機的自動巡邏功能。<br>在啓動此功能之前，請先設定啓動此功能時會作用的巡邏功能。詳情請參閱 PTZ 攝影機的使用說明書。 |
| PRESET | 預設點 | 輸入您要觀看的預設點。 |

## 3.3 主目錄選單

在螢幕任一處按右鍵即可顯示主目錄選單，再按一下即可退出。

有關 DVR 目錄完整架構，請參閱第 34 頁的「附錄 4 主目錄選單架構」。

**主目錄選單**




| | | |
|---|---|---|
| | 快速設定 | 設定狀態顯示、影像設定，以及日期和時間。 |
| | 日期設定 | 設定日期顯示和日光節約時間。 |
| | 系統資訊 | 設定系統相關配置。 |
| | 事件資訊 | 進入事件搜尋選單。 |
| | 進階選單 | 進入攝影機設定、偵測設定、警示音設定、網路設定、網路對時設定、顯示設定、錄影設定和外接裝置設定目錄。 |
| | 預約設定 | 設定預約錄影或預約偵測錄影。 |

# 4. 基本操作

## 4.1 即時畫面

| 圖示 | 功能 | 圖示 | 功能 | 圖示 | 功能 |
|---|---|---|---|---|---|
| | 即時聲音頻道 (1~4) | | 錄音回放頻道 (1~4) | | 未選取聲音頻道 |
| | 數位變焦開啓 | | 數位變焦關閉 | | 預約錄影 |
| | 無網路連線 | | 網際網路連線 | | 區域網路連線 |
| | USB 滑鼠連接 | | USB 隨身碟 / 裝置連接 | | 硬碟覆寫 |
| | 按鍵鎖 | | PTZ 模式開啓 | | 全螢幕跳台 |
| | 管理者 | | 操作者 | | 位移偵測 |
| | 錄影 | | 警報 | | |

## 4.2 錄影圖示

1) 手動錄影

根據預設，當 DVR 開機且有安裝硬碟時，就會啓動手動錄影 ( )。

2) 事件錄影

當位移偵測或警報開啓，且出現位移偵測或警報事件時，螢幕就會顯示位移偵測圖示 ( ) 或警報圖示 ( )。

3) 預約錄影

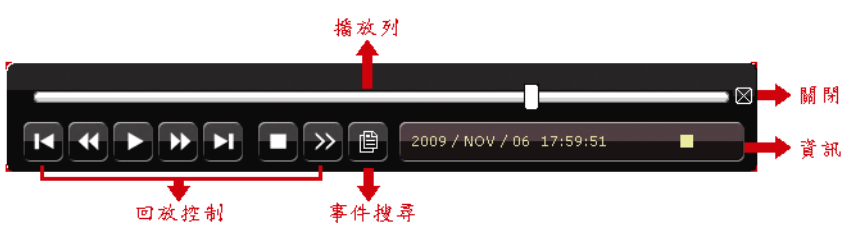
當預約錄影啓動時，螢幕會出現 圖示。

4) 硬碟覆寫

硬碟覆寫功能是預設爲開啓，且螢幕會顯示 圖示。

## 4.3 影像回放

在快速選單列按 可顯示回放操作面板。按 回放最新一筆的錄影資料，或按 進入搜尋事件清單。



**註：** 若要能正常回放錄影檔案，請至少必須錄超過 8192 張畫面。如果您尚未錄滿 8192 畫面就進行回放動作，DVR 將會停止回放。例如，如果您將 IPS 設爲 30，若要正常回放檔案，則錄影時間至少必須超過 273 秒 (8192 張影像 / 30 IPS)。

**註：** 在回放影像時，螢幕會顯示錄影的影像大小 (FRAME、FIELD 或 CIF)。

### 4.3.1 回放操作

| | | |
|---|---|---|
| | 快轉 | 加快回放速度。按一次以 4 倍的速度回放快轉畫面，按兩次以 8 倍的速度 … 以此類推。 |
| | 倒轉 | 增加影像倒轉速度。按一次以 4 倍的速度倒轉畫面，按兩次以 8 倍的速度 … 以此類推。 |
| / | 播放 / 暫停 | 按 立即回放最近一筆的影像資料，按 即暫停。<br>在暫停時，按一次 可前進一張影像，按 倒轉一張影像。 |
| | 停止 | 按一下停止影像回放。 |
| | 慢速回放 | 按一下以 1/4X 速度慢速回放錄影影片，按兩下以 1/8X 速度慢速回放。 |
| / | 前一個 /<br>下一個小時 | 按一下可跳至下一個 / 前一個小時 (例如 1:00 ~ 12:00 或 14:00 ~ 15:00)，並立即播放在該時段中最早的錄影資料。 |

### 4.3.2 事件搜尋

按 可依事件快速搜尋錄影資料：**錄影清單 / 位移事件清單 / 警報事件清單 / 時間清單**，或者選擇**全部事件清單**顯示所有事件記錄。

若要進行時間搜尋，請選擇**快速搜尋**。設定想要的時間，然後選擇**開始**回放指定時間內的錄影資料。

### 4.3.3 錄音回放

在回放時，視需要按快速目錄列上的 來選取要聽聲音頻道 1~4 的即時聲音或錄音。

即時聲音頻道 1~4 (以白色顯示)　錄音回放頻道 1~4 (以黃色顯示)　未選取任何聲音頻道

**註：** 要備份影音資料，請先確認攝影機有支援收音功能，並連接到正確的影像頻道和聲音頻道。例如，聲音頻道 1 的聲音資料會與影像頻道 1 的影像資料錄在一起。

## 4.4 切換使用權限

當按鍵上鎖 () 時，移動 USB 滑鼠即會顯示密碼輸入視窗。DVR 支援兩種使用權限：管理者 () 和操作者 ()。

若輸入管理者密碼，螢幕狀態列會顯示 ，使用者可以執行所有操作。預設的管理者密碼爲 0000。

若輸入操作者密碼，螢幕狀態列會顯示 ，且使用者**無法**進入主目錄選單。操作者權限必須進入主目錄選單的**系統資訊 → 工具**中設定。

若要切換這兩種使用權限，先點一下目前的權限圖示進入按鍵鎖模式，然後再動一下滑鼠顯示密碼輸入視窗，再輸入想要切換的使用權限密碼。

## 4.5 影像輸出切換

使用者無法同時連接 CRT 螢幕 (連接到 MONITOR) 和 LCD 螢幕 (連接到 VGA) 來顯示影像。

預設的影像輸出設定爲**自動**，即 DVR 會自動偵測影像輸出來源。若 VGA 和 MONITOR 都有接螢幕，預設會選取 VGA 來進行影像輸出。

如何手動變更影像輸出設定：

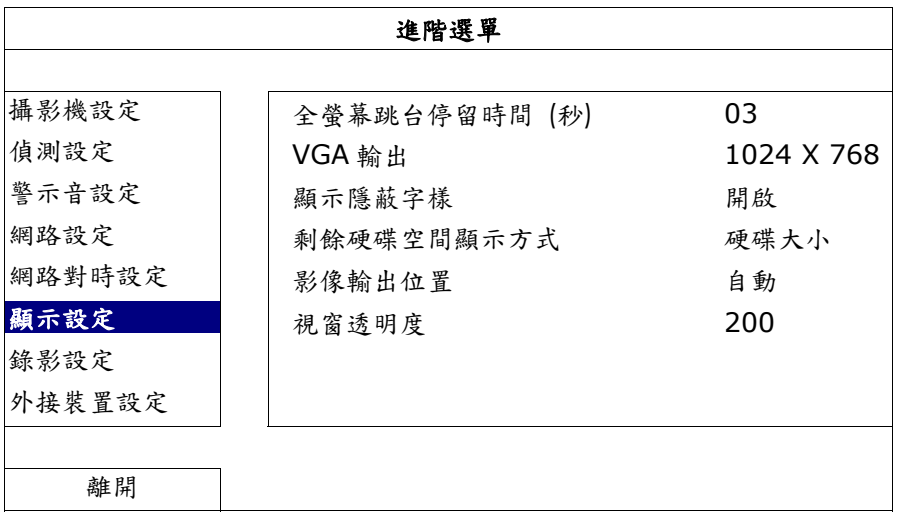
- 若要強制透過 MONITOR 進行影像輸出，請在 DVR 開機時按面板左鍵 ◄。
- 若要強制透過 VGA 進行影像輸出，請在 DVR 開機時按面板右鍵 ►。

當您聽見一聲短嗶聲，表示設定已變更完成。

*或者：*

等到 DVR 開完機且初始化完成後，按右鍵進入主目錄選單，然後選擇**進階選單 → 顯示設定 → 顯示輸出位置**。

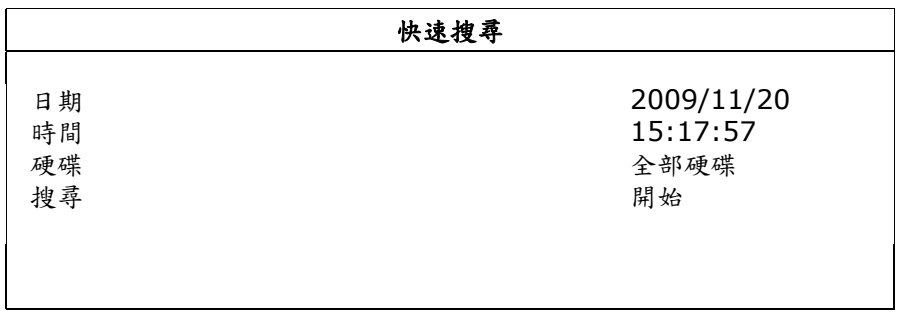
選擇 VGA 切換影像輸出到連接的 LCD 螢幕，COMPOSITE 則是切換到連接的 CRT 螢幕。之後 DVR 會重新啓動，以使變更生效。



# 5. 常用功能

## 5.1 快速搜尋

按 DVR 面板上的 SEARCH 可進入時間搜尋選單如下：




1) 日期 / 時間

選擇您要搜尋資料的日期和時間。

2) 硬碟

選擇包含您要搜尋資料的硬碟，或者選擇全部硬碟。

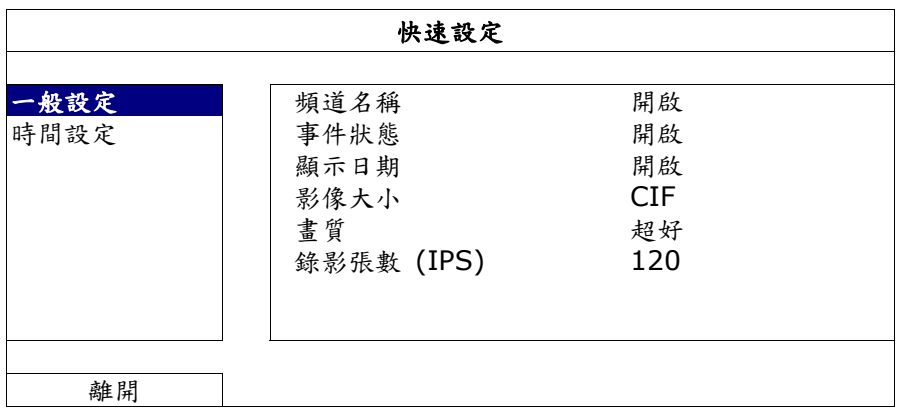
3) 搜尋

按送出可開始搜尋並立即回放找到的影像資料。

## 5.2 錄影設定

### 5.2.1 錄影快速設定

按右鍵顯示主目錄選單，然後選擇快速設定 → 一般設定。




1) 影像大小

選擇影像大小：FRAME、FIELD 或 CIF。

2) 畫質

選擇錄影畫質：超好、最好、高和一般。

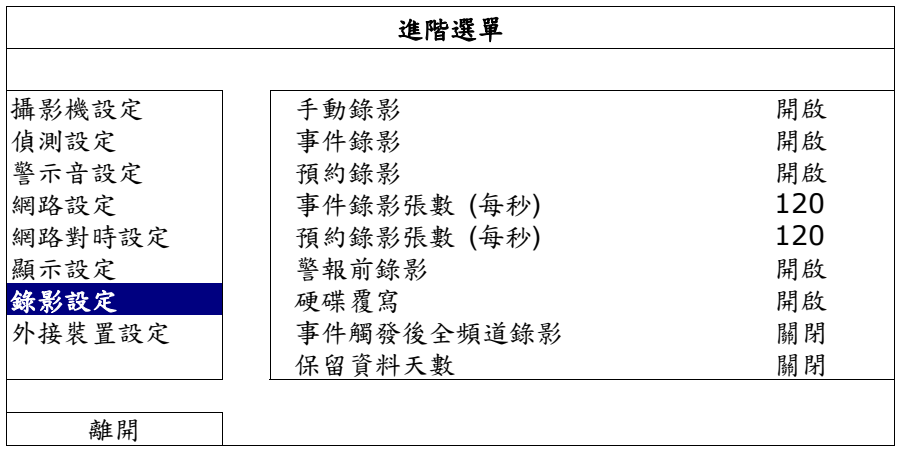
3) 錄影張數 (IPS)

選擇手動錄影的 IPS (每秒播放圖像的速度)。

### 5.2.2 錄影詳細設定

按右鍵顯示主目錄選單，然後選擇進階選單 → 錄影設定。

**註：** 請勿在錄影時修改日期和時間；否則，錄影資料會錯亂，而且無法依時間來搜尋想要備份的資料。若修改了日期和時間，建議先將硬碟資料清除後再重新錄影，以免造成錄影時間錯亂。




1) 手動錄影

設定開啓或關閉手動錄影。

2) 事件錄影

設定開啓或關閉事件錄影。

3) 預約錄影

設定開啓或關閉預約錄影。

4) 事件錄影張數 (每秒)

選擇事件錄影 (警報或位移偵測觸發錄影) 的每秒錄影張數。

5) 預約錄影張數 (每秒)

選擇預約錄影 (依照設定排程啓動錄影) 的每秒錄影張數。

6) 警報前錄影

設定警報前錄影功能開/關 (開啟 / 關閉)。

當事件錄影功能與警報前錄影功能皆爲啓動狀態下，若發生警報或位移偵測，DVR 會從觸發前 8MB 的檔案開始錄起。

7) 硬碟覆寫

開啓此功能後，當硬碟已滿時，便會開始覆寫之前的錄影資料。DVR 會清除 8MB 最舊的錄影資料讓錄影繼續進行，不另行通知。

8) 事件觸發後全頻道錄影

選取在發生事件時，要全頻道錄影 (開啟)，還是僅錄發生事件的頻道 (關閉)。

9) 保留資料天數

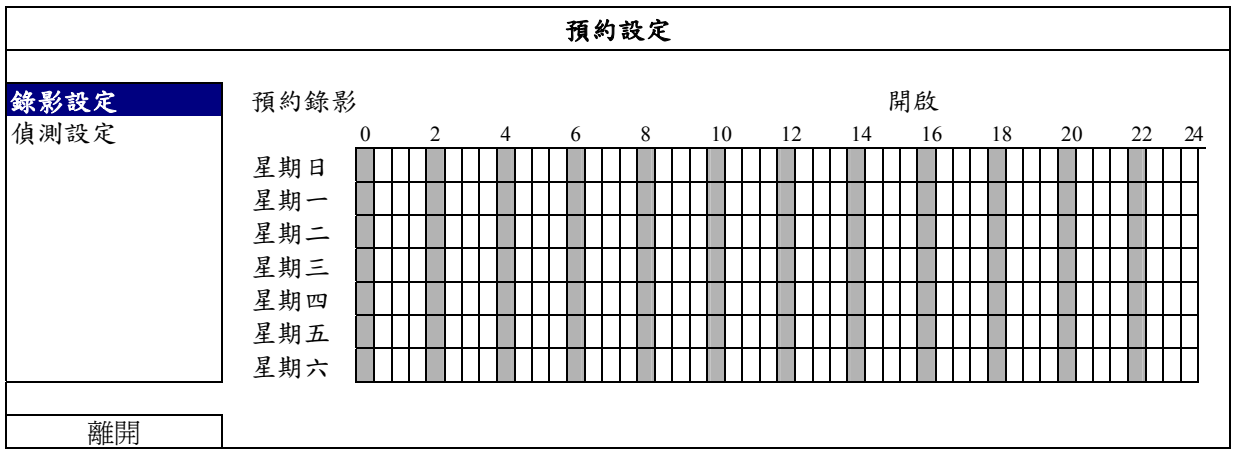
指定保留錄影資料的天數 (1~31 天)，超過指定天數的錄影資料將會自動刪除。若要關閉此功能，請選擇關閉。

## 5.3 預約設定

按右鍵顯示主目錄選單，然後選擇預約設定。

### 5.3.1 預約錄影

點選錄影設定。在預約錄影選擇開啟來啓用此功能，然後選擇啓動此功能的日子和時間。

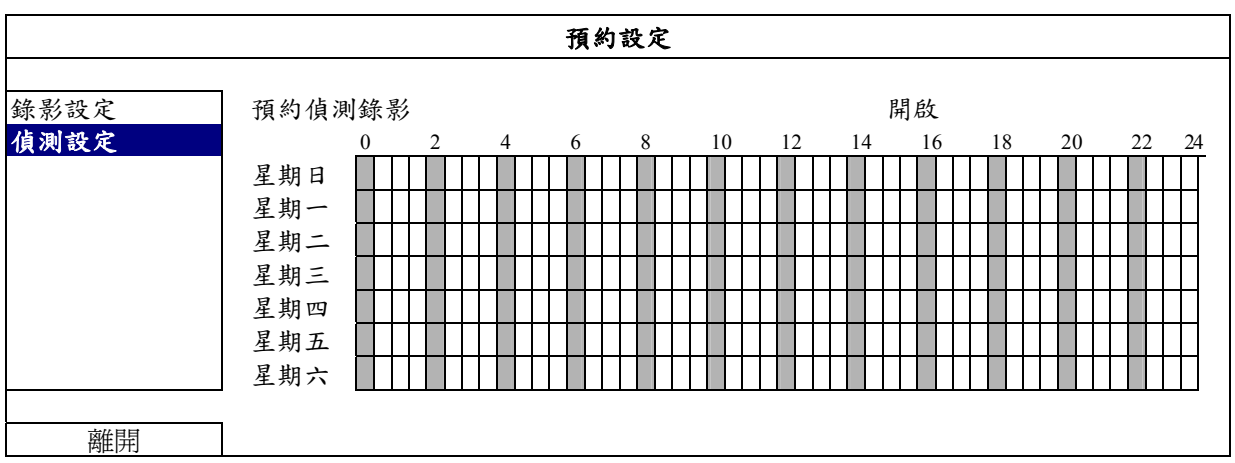



**X 軸** 0 ~ 24 小時。每段時間間隔爲 30 分鐘。

**Y 軸** 星期一 ~ 星期日。

### 5.3.2 預約偵測錄影

點選偵測設定。在預約偵測錄影選擇開啟來啓用此功能，然後選擇啓動此功能的日子和時間。

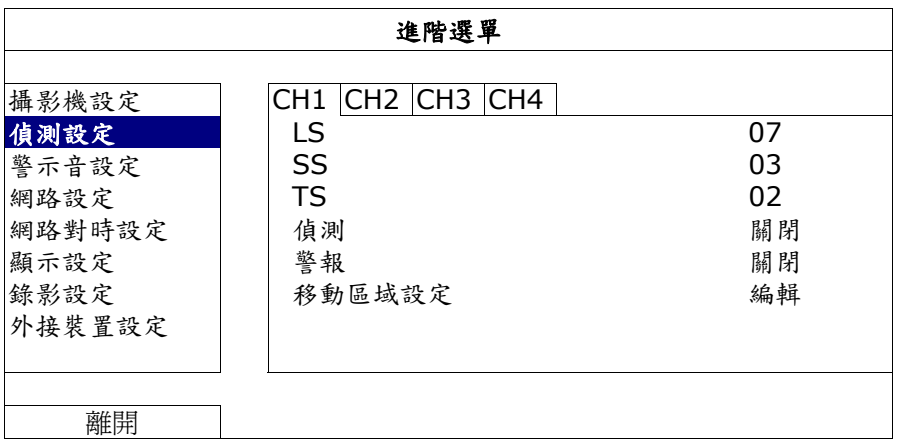



**X 軸** 0 ~ 24 小時。每段時間間隔爲 20 分鐘。

**Y 軸** 星期一 ~ 星期日。.

## 5.4 偵測設定

按右鍵顯示主目錄選單，然後選擇進階選單 → 偵測設定。




1) LS (靈敏度)

"LS" 是比較兩張不同影像的靈敏度。數值越小，位移偵測的靈敏度越高。靈敏度最高爲 00，最低爲 15。預設值爲 07。

2) SS (空間靈敏度)

"SS" 是偵測螢幕上物體大小 (位移偵測的格子數目) 的靈敏度。數值越小，位移偵測的靈敏度越高。靈敏度最高爲 00，最低爲 15。預設值爲 03。

**註：** SS 的預設值爲 03，意指若被偵測的物體若在螢幕上超過 3 格，將會觸發位移偵測。故 SS 數值必須比您所設定的位移偵測格數還要少。

3) TS (時間靈敏度)

"TS" 是物體持續觸發位移偵測的時間長短的靈敏度。數值越小，位移偵測的靈敏度越高。
靈敏度最高爲 00，最低爲 15。預設值爲 02。

4) 偵測

選擇是否要啓動選取頻道的位移偵測功能 (開啟/關閉)。

5) 警報

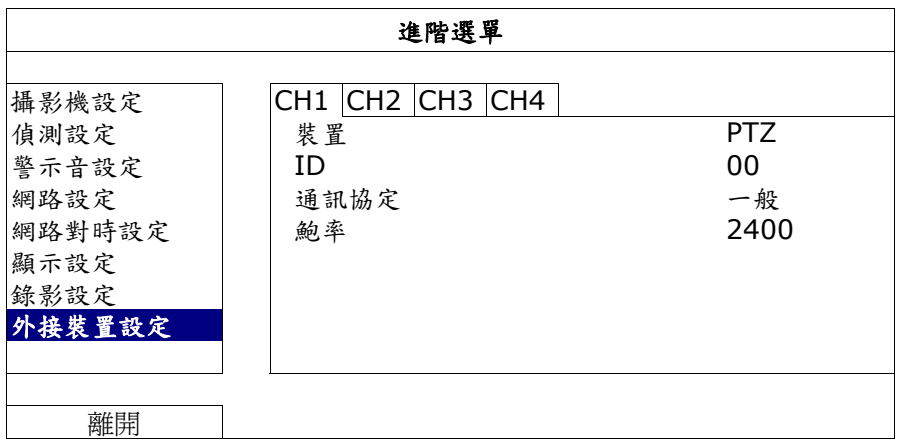
視安裝需求選擇 N.C./ N.O。預設值爲關閉。

6) 移動區域設定

按編輯設定位移偵測區域。
每隻攝影機的偵測區域皆可分爲 16 * 12 個方格。粉紅色格子代表未被偵測的區域，而透明的格子代表有偵測的區域。

## 5.5 PTZ 攝影機設定

按右鍵顯示主目錄選單，然後選擇進階選單 → 外接裝置設定。




1) 裝置

PTZ 攝影機請選擇 PTZ。

2) ID

若有必要，按一下目前的 ID 進入設定 PTZ 攝影機 ID 畫面 (0 ~ 255)。
確認攝影機本身的 ID 和此處的設定相符，否則 DVR 將無法控制此裝置。

**註：** 如需得知各 PTZ 攝影機的預設 ID，請參閱其各自的使用說明書。

3) 通訊協定

選擇一般 (本品牌的通訊協定)、P-D (PELCO-D) 或 P-P (PELCO-P) 通訊協定。

4) 鮑率

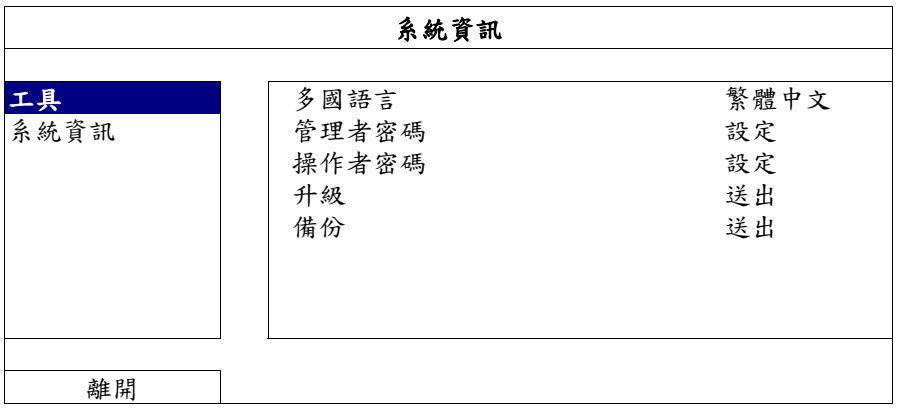
選擇連接 PTZ 攝影機的鮑率 (2400 / 4800 / 9600 / 19200 / 57600 / 115200)。
確認攝影機本身的鮑率和此處的設定相符，否則 DVR 將無法控制此裝置。

**註：** 如需得知各 PTZ 攝影機的預設鮑率，請參閱其各自的使用說明書。

## 5.6 系統設定

### 5.6.1 密碼設定

按右鍵顯示主目錄選單，然後選擇**系統資訊** → **工具**。




1) 管理者密碼

按**設定**即可變更管理者密碼。預設的管理者密碼爲 **0000**。

當系統提示您輸入 DVR 時，輸入管理者密碼後，螢幕狀態列就會出現 ，表示所有操作皆可使用。

2) 操作者密碼

按**設定**即可設定或變更操作者密碼。

當系統提示您輸入 DVR 時，輸入操作者密碼後，螢幕狀態列就會出現 ，使用者**無法**進入主目錄選單。

### 5.6.2 系統更新

按右鍵顯示主目錄選單，然後選擇**系統資訊** → **工具** → **升級**。

將從安裝商或經銷商取得的升級檔儲存在相容的 USB 隨身碟內，然後插入前面板的 USB 埠。

然後，按**送出**開始進行升級。

**註：** 在使用 USB 隨身碟之前，請先使用您的電腦將 USB 隨身碟格式化成 FAT32 的格式。若欲得知相容的 USB 隨身碟品牌，請參閱第 32 頁的「附錄 2 相容 USB 隨身碟品牌」。

**註：** 若您當前的 DVR 系統版本太舊，升級可能會導致清除所有硬碟資料。因此，在升級 DVR 系統之前，請先與您的安裝商或經銷商確認您當前的 DVR 系統版本，然後建立必要的影像備份。

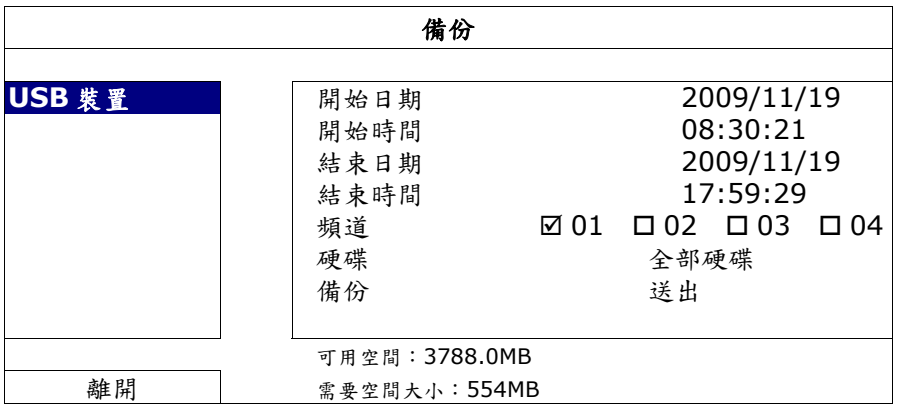
### 5.6.3 影像備份

按右鍵顯示主目錄選單，然後選擇**系統資訊** → **工具** → **備份**。

將相容 USB 隨身碟插入前面板的 USB 埠。

**註：** 在使用 USB 隨身碟之前，請先使用您的電腦將 USB 隨身碟格式化成 FAT32 的格式。若欲得知相容的 USB 隨身碟品牌，請參閱第 32 頁的「附錄 2 相容 USB 隨身碟品牌」。

然後，按送出進入以下備份頁面。




1) 開始日期 / 開始時間
   選擇備份的開始日期和時間。

2) 結束日期 / 時間
   選擇備份的結束日期和時間。

3) 頻道
   點選想要備份的頻道。

4) 硬碟
   選擇包含您要的影像資料的硬碟，或者選擇全部硬碟。

5) 備份
   按送出開始備份。

■ 備份檔案回放

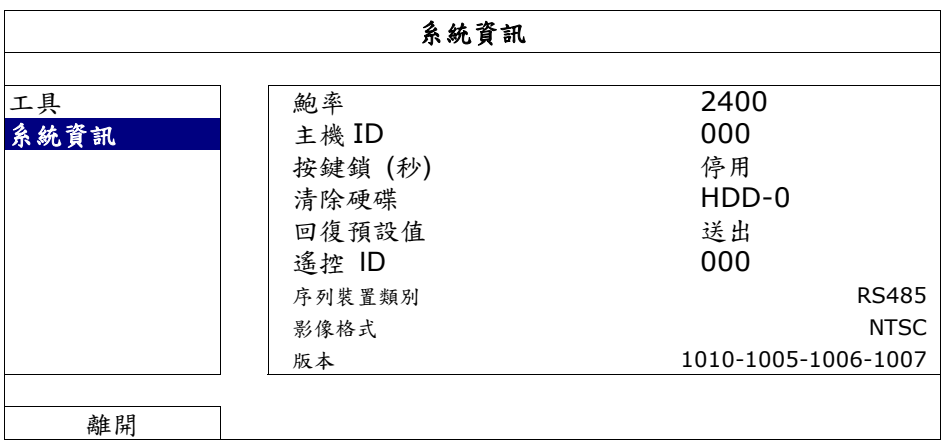
在備份時，會同時複製檔案播放軟體安裝檔 PLAYER.EXE 到 USB 隨身碟中，且螢幕會顯示 CHECK PLAYER 訊息。

將 USB 隨身碟插入電腦，然後讀取隨身碟資料。選取 PLAYER.EXE，然後點兩下執行安裝。安裝完成後，點兩下備份下來的檔案即可直接在電腦播放。請確認檔案備份是否成功。

**註：** 支援的電腦作業系統爲 Windows 7、Vista、XP & 2000。

### 5.6.4 清除所有硬碟資料

按右鍵顯示主目錄選單，然後選擇系統資訊 → 系統資訊 → 清除硬碟。




選取想要清除資料的硬碟，然後按是確認，或否取消。

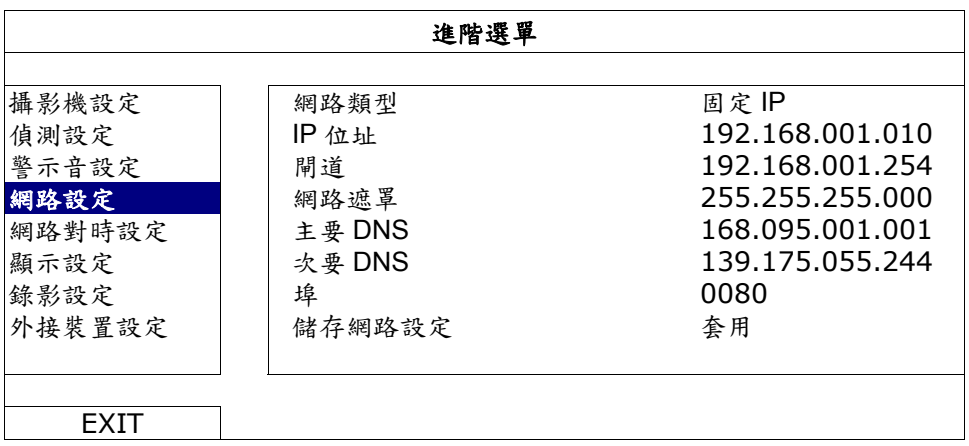
在以下情況下，建議使用者清除所有資料：

- 初次使用 DVR 時。此舉可確保新的錄影資料不會與之前儲存在相同硬碟內的其他資料混在一起。
- 在錄影功能啓動時，變更 DVR 的日期和時間。否則，錄影資料會錯亂，而且無法依時間來搜尋想要備份的資料。

## 5.7 網路設定

以下僅說明固定 IP 的設定方式。若要設定 PPPOE 和 DHCP，必須至 Video Viewer 進行設定。
詳情請下載 Video Viewer 的使用說明書：http://www.surveillance-download.com/user/CMS.pdf。

### 固定 IP




1) 網路類型

將網路類型設成固定 IP，然後設定 DVR 需要的所有資訊。

2) 網路資訊 (IP 位址 / 閘道 / 網路遮罩)

輸入您由網路 ISP 業者那得到的所有網路資訊。

3) DNS (主要 DNS / 次要 DNS)

輸入您由網路 ISP 業者那得到的 DNS (網域名稱伺服器) IP 位址。

4) 埠

有效數值範圍爲 1 到 9999。預設值爲 80。一般而言，HTTP 所使用的 TCP 埠多半爲 80 埠。然而有些情形下，建議您最好變更此埠值以增加彈性或安全性。

5) 儲存網路設定

按套用確認設定。

# 6. 遠端操作

您也可以透過免費的授權軟體 Video Viewer、Internet Explorer 網路瀏覽器和 Apple 的 QuickTime 多媒體播放軟體來遠端操控 DVR。

## 6.1 免費授權軟體

以下各節僅說明 Video Viewer 的常用功能。如需得知此軟體與網路設定的詳細資訊，請下載其使用說明書：
http://www.surveillance-download.com/user/CMS.pdf

### 6.1.1 軟體安裝 & 網路連線

1) 安裝軟體

步驟 1： 將隨附的 CD-ROM 放到 DVD- / CD-ROM 光碟機中。程式會自動啓動如下。
步驟 2： 選取 Licensed Software AP 下的 Download The Latest Version，從網路下載最新版的 Video Viewer。
步驟 3： 請遵照螢幕上的指示完成安裝程序。安裝結束後，電腦桌面會出現 捷徑圖示。

2) 網路連線

➢ 區域連線 (透過 LAN)

若想要遠端存取 DVR 並進行網路設定，請先透過 LAN 存取 DVR。

a) 使用一條 RJ45 網路線連接 DVR 和電腦。DVR 的預設值如下：

| 項目 | 預設值 |
|---|---|
| IP 位址 | 192.168.1.10 |
| 使用者名稱 | admin |
| 密碼 | admin |
| 埠號 | 80 |

b) 將電腦的 IP 位址設爲 “192.168.1.XXX” (1~255 皆可，除了 10 之外)，讓電腦以及 DVR 位在同一個網域。

c) 連按兩下桌面上的 圖示進入 Video Viewer 控制面板。依據預設，Video Viewer 的控制面板右側會顯示連線位址簿畫面。

d) 按 → 輸入您要連線的 DVR 預設 IP 位址、使用者名稱、密碼和連接埠號。

*或者*

按 → 搜尋與您的電腦 IP 位址位在相同網域下的其他 DVR 的 IP 位址。之後會列出找到的位址。您可以按 將該位址加入連線位址簿。

e) 連按兩下您剛加入連線位址簿的 IP 位址進行登入。

➢ 遠端連線 (透過 Internet)

當 DVR 的網路設定完成，就可以透過 Internet 遠端存取 DVR。

a) 連按兩下桌面上的 圖示進入 Video Viewer 控制面板。依據預設，Video Viewer 的控制面板右側會顯示連線位址簿畫面。

b) 按 → 輸入您要連線的 DVR IP 位址、使用者名稱、密碼和連接埠號。

*或者*

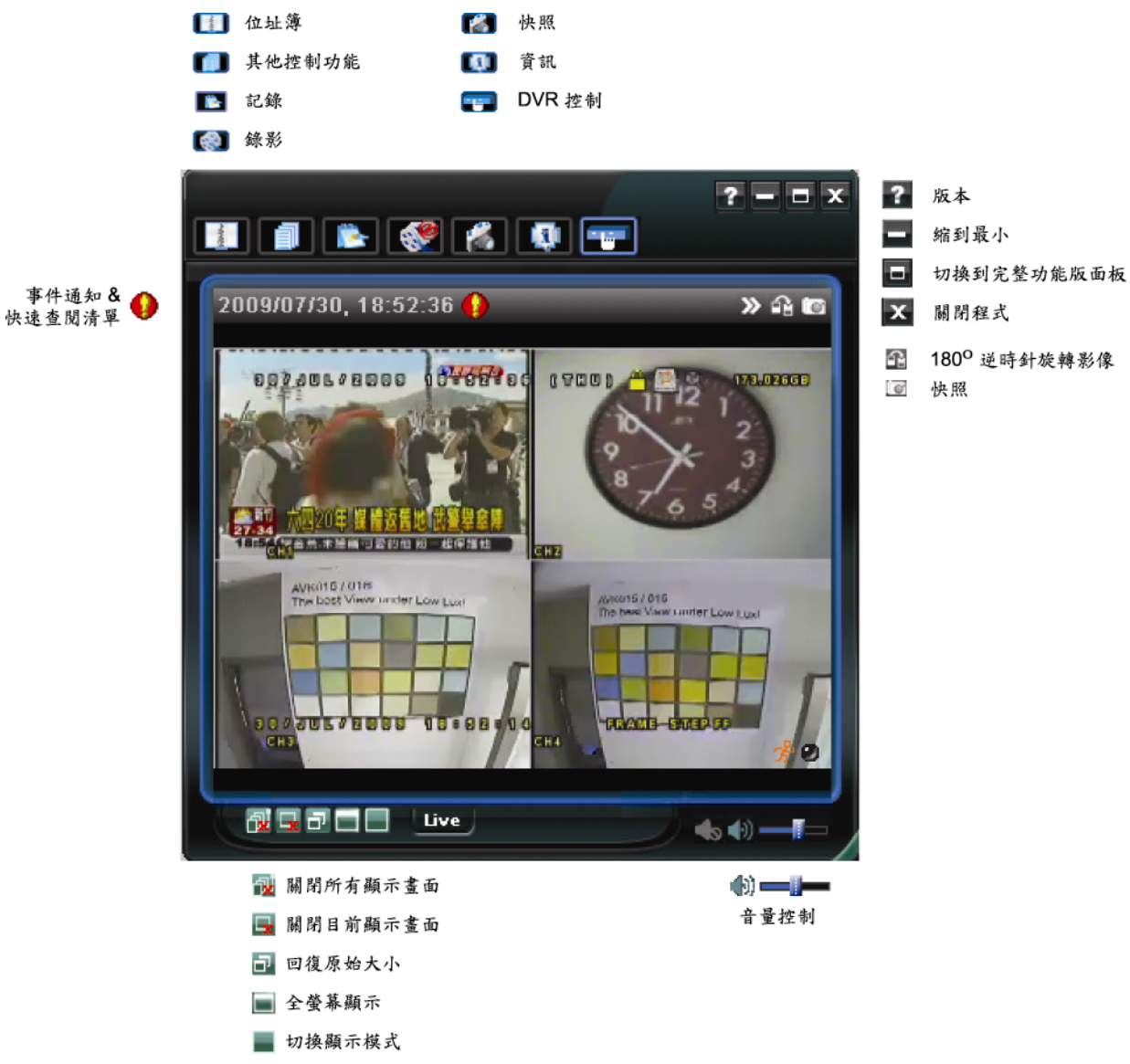
按 → 搜尋與您的電腦 IP 位址位在相同網域下的其他 DVR 的 IP 位址。之後會列出找到的位址。您可以按 將該位址加入連線位址簿。

c) 連按兩下您剛加入連線位址簿的 IP 位址進行登入。

### 6.1.2 控制面板簡介

依據個人使用習慣，總共有兩種控制面板可供選擇。

<u>簡化版 (預設)</u>



## 完整功能版

## 主要按鈕簡介

| 按鈕 | | 功能 | 說明 | | |
|---|---|---|---|---|---|
| 簡化版 | 完整版 | | | | |
| | | 位址簿 | 按一下可顯示預設的 IP 位址。您可以新增、移除或搜尋要遠端登入的 DVR IP 位址。 | | |
| | | 其他控制功能 | | 遠端設定 | 按一下可進入詳細的 DVR 設定頁面。 |
| | | | | 錄影設定 | 按一下可進入詳細的錄影設定頁面。 |
| | | | | 自訂設定 | 按一下可選擇此程式的語言。語言變更會在程式下次執行時生效。 |
| | | 記錄 | 按一下可查看所有的事件和錄影記錄、依日期搜尋想要的記錄。 | | |
| | | 錄影 / 停止錄影 | 按一下可開始 / 停止手動錄影。 | | |
| | | 快照 | 按一下可擷取目前畫面的快照。影像快照會儲存在 “Record Setting” (錄影設定) 下指定的位置。 | | |
| | | 資訊 | 按一下可顯示目前的網路連線詳細資訊。 | | |
| | | DVR 控制 | 按一下可進入 DVR 控制面板來遠端操作 DVR。 | | |

### 6.1.3. 常用功能

## 錄影設定

若要在 DVR 端觸發事件時，遠端也同時進行錄影備份，請按  或  →  進入錄影設定頁面。

在此頁面可以設定以下功能：

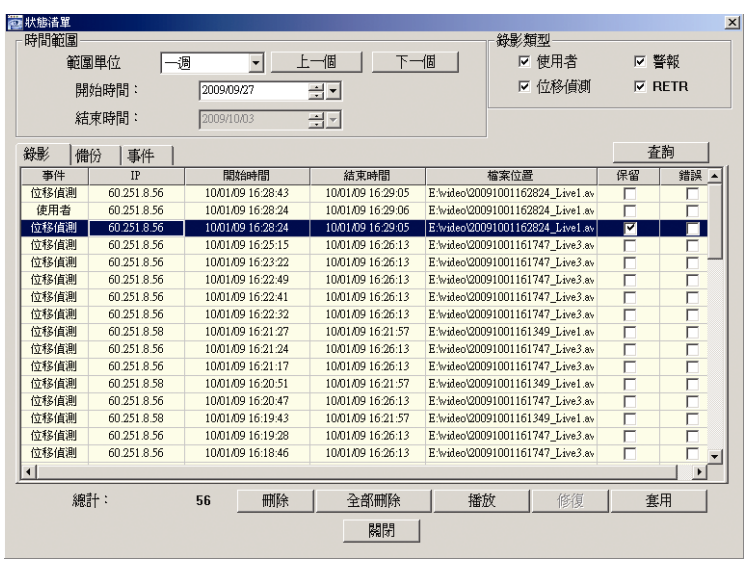
- 錄影類型
- 硬碟覆寫
- 事件前 / 後錄影時間
- 錄影時間設定
- 錄影檔案存放路徑

若勾選了**手動**，則按  或  就會立即啓動手動錄影，而且錄影檔會儲存在您指定的位置。

若勾選了**位移偵測**和 / 或**警報**，則當 DVR 端有觸發事件時，遠端也會立即啓動錄影功能，而且錄影檔會儲存在您指定的位置。

## 影像回放

若要回放錄影檔，請按  或 ，然後選擇**錄影**標籤或**備份**標籤。預設會顯示所有的錄影檔清單，您也可以依類型列出想要的記錄來加快搜尋的速度。

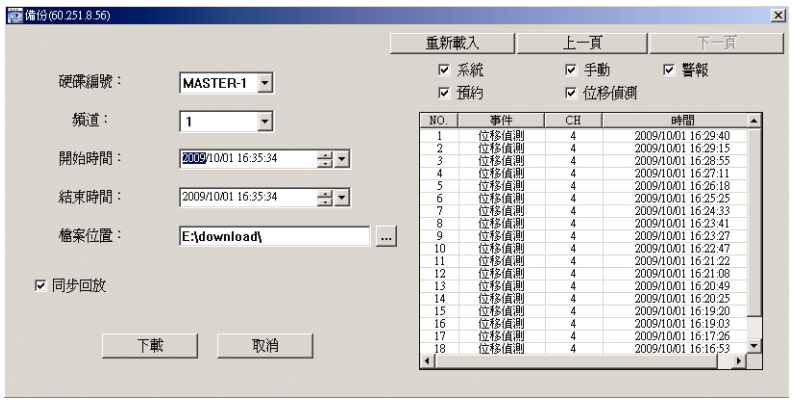



若要立即回放某錄影檔，請從清單選取一筆記錄，然後按**播放**按鈕，或者連按兩下選取的記錄進行回放。

## 網路備份

按一下 → ，或者按 進入頁面，然後就可以選取要遠端備份特定時間範圍內的影像資料，或者備份特定事件的影像資料。

之後會從目前選取的 IP 位址備份檔案。




| 功能 | 說明 |
|---|---|
| 硬碟編號 / 頻道 | 指定擁有您要備份之資料的硬碟和頻道。 |
| 下載指定時間內的影像資料 | 在開始時間和結束時間欄位指定您要備份的時間範圍。 |
| 下載指定事件的影像資料 | 從右側的事件清單中選取您要下載的特定事件。此清單由上而下會先顯示最近一筆的事件再依序顯示發生時間較早的事件。<br>• 若要快速找出特定事件，請勾選或取消勾選系統 / 手動 / 警報 / 位移偵測事件類型，然後選取想要的事件。<br>• 若想要查看較早或較晚的事件記錄，而該記錄沒有顯示在目前的頁面中時，請按一下上一頁或下一頁。<br>• 若要更新事件清單，請按一下重新載入。 |
| 檔案位置 | 指定備份下來的檔案要儲存的位置。 |
| 同步回放 | 若要在下載時同步觀看備份的影像，請先勾選同步回放。您會在下載備份影像到電腦時看見影像內容。<br>若只要下載備份影像而不要預覽，請取消選取同步回放。您只會看見一個訊息方塊，指出下載所需的總時間、目前的狀態和儲存位置。 |
| 下載 / 取消 | 按一下下載開始備份影像，或取消不要備份影像。 |

### 6.1.4. E-Map

Video Viewer 同時也是一套中控系統 (CMS) 軟體，可讓您同時管控高達 16 個網路裝置。

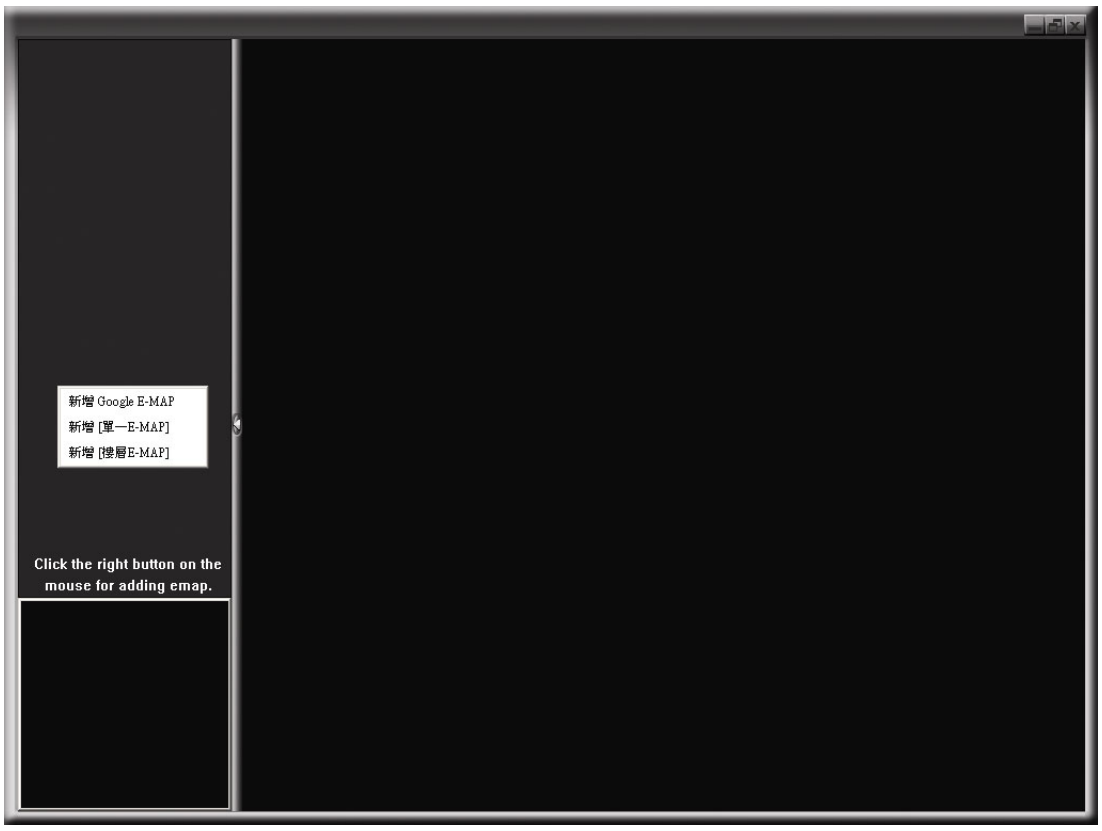
**註：** 在使用此功能之前，請先確認 Video Viewer 是否已連接到您要監控的裝置 (最多 16 個)。

E-MAP *只有* 在切換到完整功能版控制面板時才能使用。

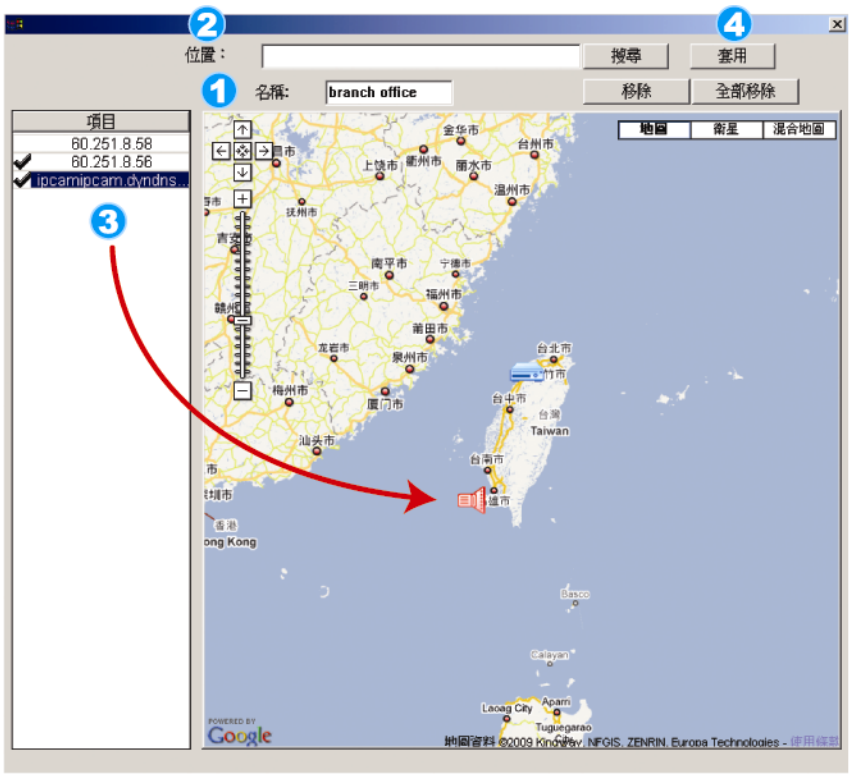
### 如何新增 E-MAP 群組

步驟 1： 在簡化版控制面板下，按 切換到完整功能版，然後按 進入 E-MAP 頁面如下。

**註：** 如需得知各按鈕的位置，請參閱第 20 頁的「簡化版 (預設)」和第 21 頁的「完整功能版」。

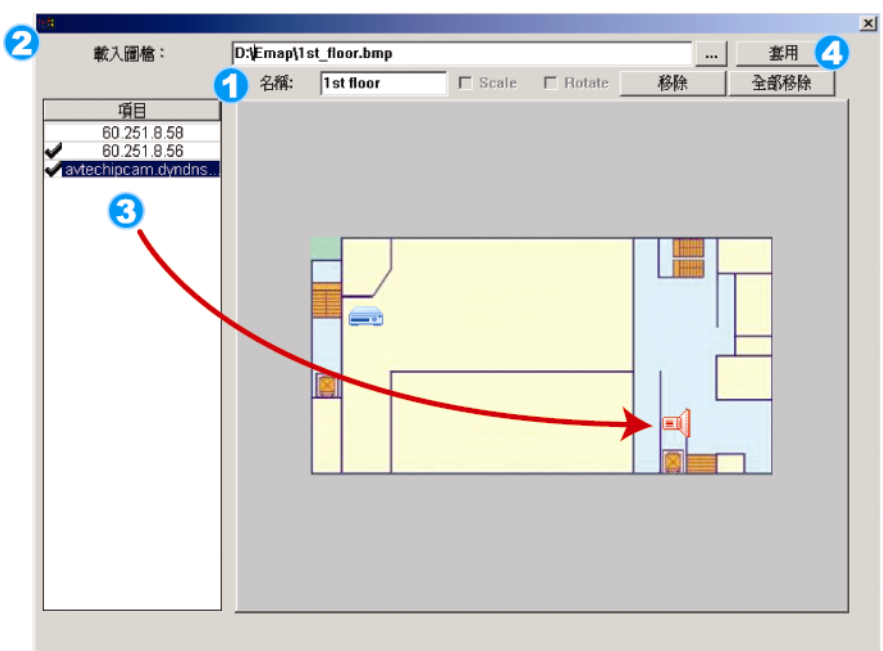



步驟 2： 在左上區域按右鍵顯示快捷選單，然後選擇您要新增的 E-MAP 群組。您可以新增三種 E-MAP 群組：Google E-MAP、單一 E-MAP 和樓層 E-MAP。



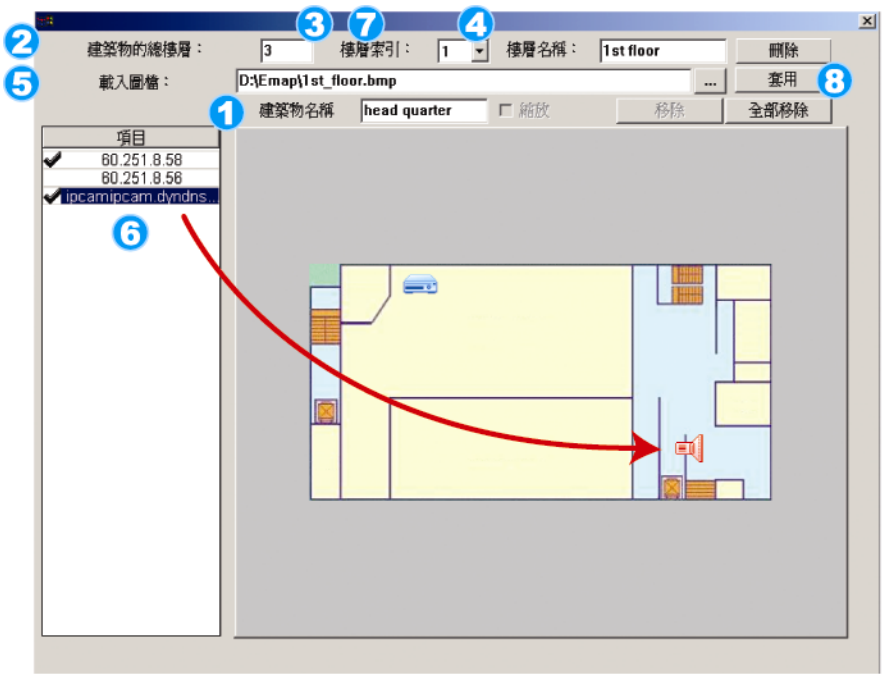

如何新增 **Google E-MAP** 群組：

1. 輸入 Google E-MAP 群組的名稱。
2. 輸入特定地址或地標，然後按「搜尋」。
   或者
   直接在地圖上拖移到想要的地點。
3. 將 IP 位址拖曳到地圖上與其實際安裝的相對位置。
4. 按「套用」儲存並結束。




如何新增單一 **E-MAP** 群組：

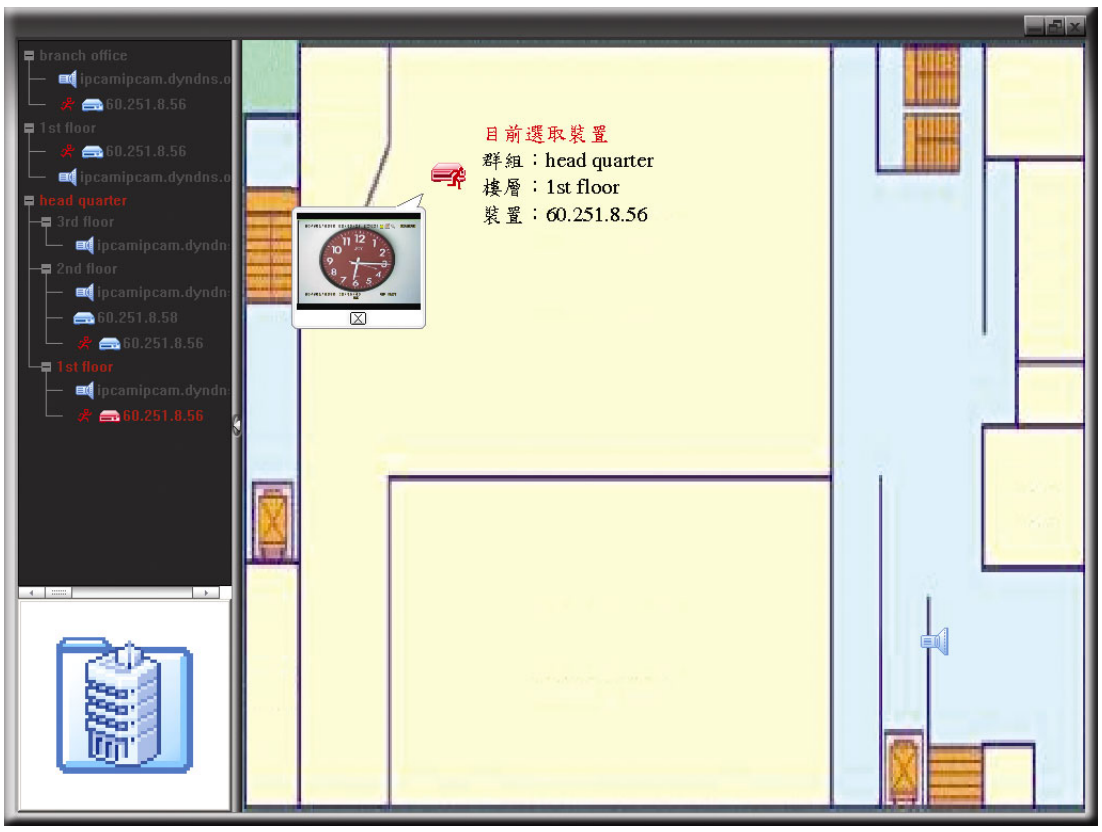
1. 輸入單一 E-MAP 群組的名稱。
2. 按 "..." 瀏覽到地圖檔，格式為 BMP 或 JPEG。
3. 將 IP 位址拖曳到地圖上與其實際安裝的相對位置。
4. 按「套用」儲存並結束。




如何新增樓層 **E-MAP** 群組：

1. 輸入樓層 E-MAP 群組的名稱。
2. 輸入此大樓的總樓層數。
3. 從下拉式清單選擇想要的樓層。
4. 輸入樓層名稱。
5. 按“...”瀏覽到地圖檔，格式為 BMP 或 JPEG。
6. 將 IP 位址拖曳到地圖上與其實際安裝的相對位置。
7. 回到步驟 3 選擇大樓的其他樓層，再重複步驟 3 到 6，直到所有樓層都設定完畢為止。
8. 按「套用」儲存並結束。

步驟 3： 新增 E-MAP 群組後，您會看見左上區域出現一個樹狀架構，顯示您新增到此群組的所有裝置。



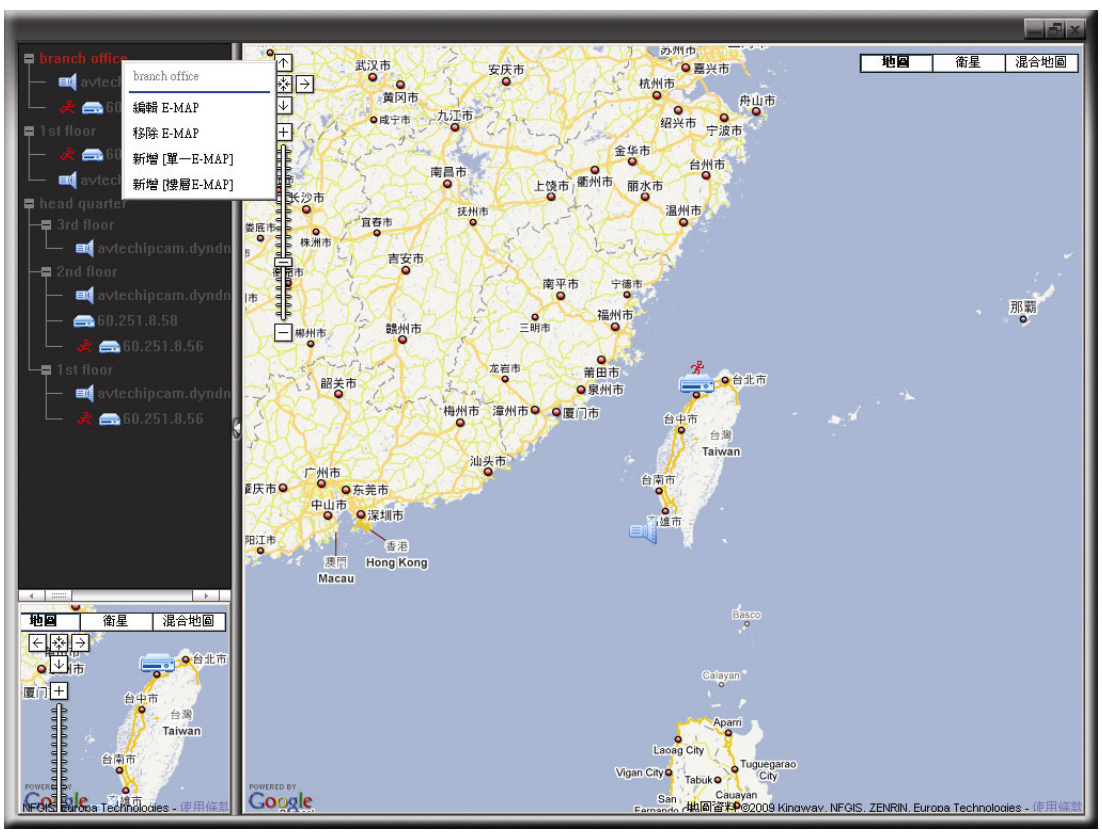

| 圖示 | 說明 |
|---|---|
| | 連接裝置爲攝影機。選取時會變成紅色的。 |
|  | 連接裝置爲 DVR。選取時會變成紅色的。 |
|  | 若發生位移或警報事件，此圖示就會出現在螢幕上。<br>若需快速得知發生什麼事，只要連按兩下 E-MAP 上的裝置圖示，就會立即顯示即時畫面。 |

## 如何編輯 / 移除現有 E-MAP 群組

- Google E-MAP 群組

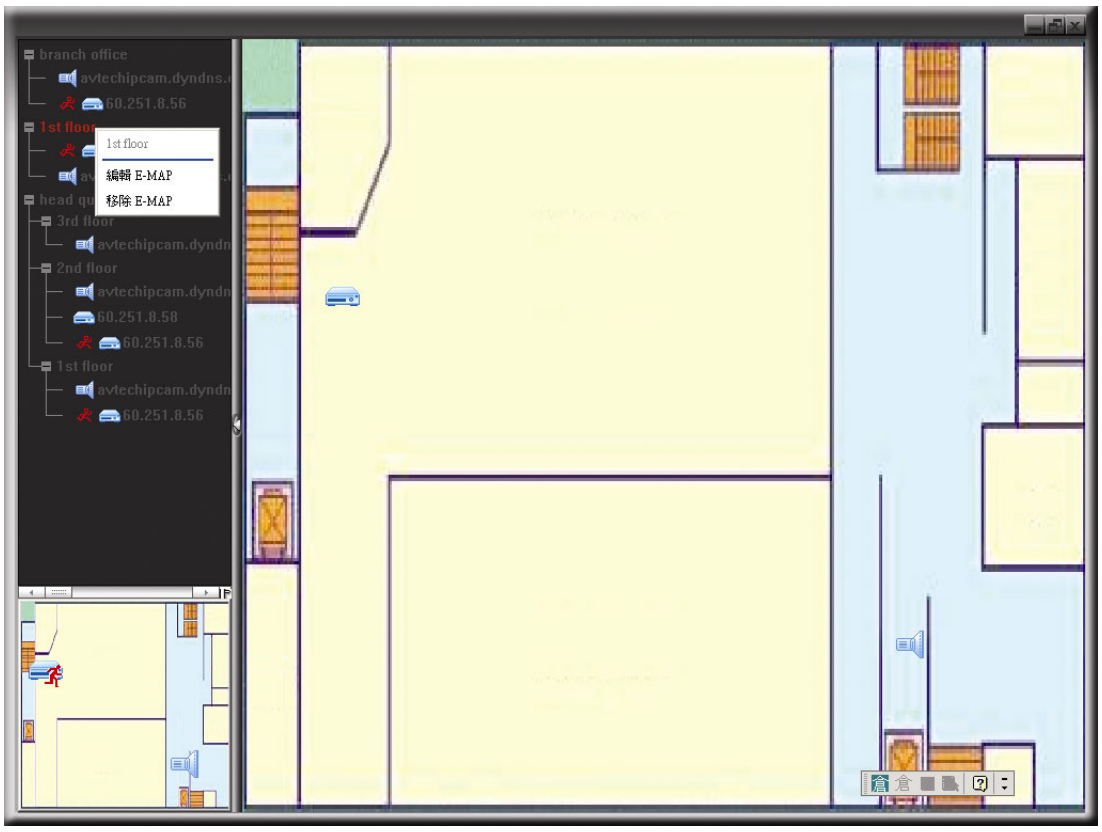
  在群組名稱上按右鍵顯示快捷選單，然後選擇編輯 E-MAP 或移除 E-MAP。

  您也可以新增單一 E-MAP 群組 (新增 [單一 E-MAP]) 或樓層 E-MAP 群組 (新增 [樓層 E-MAP]) 到現有的 Google E-MAP 群組中。



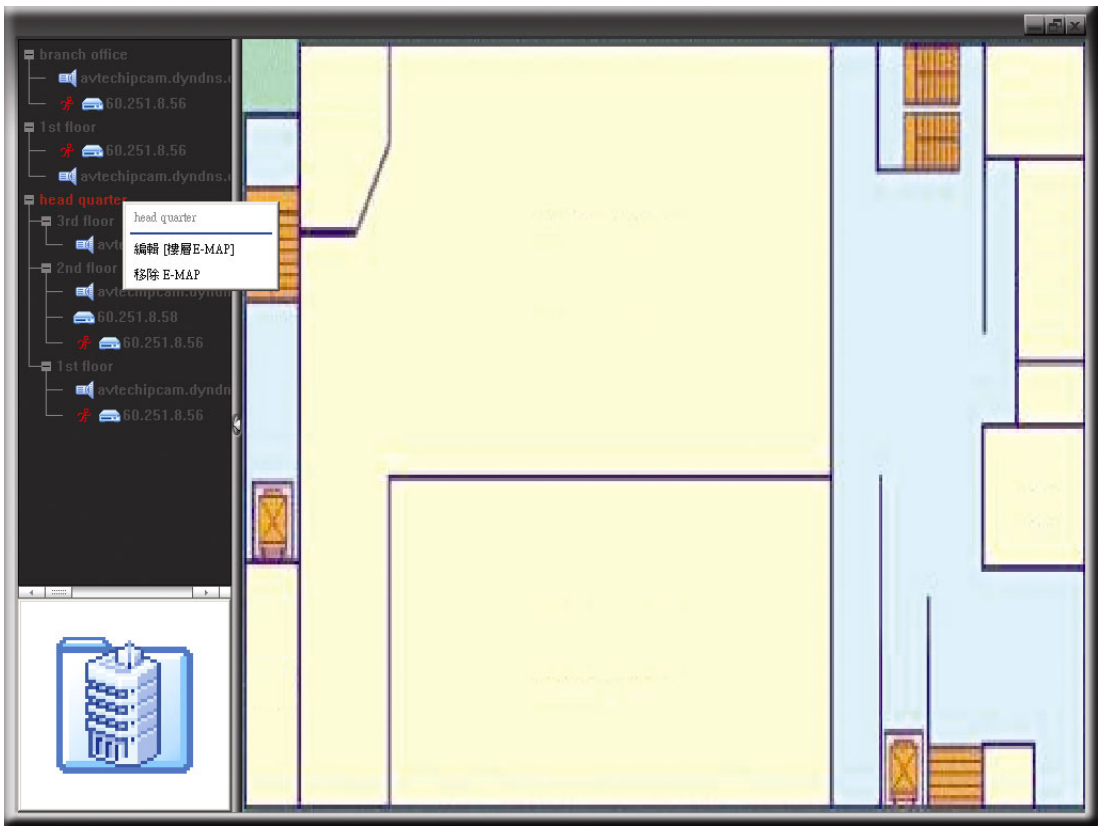
- 單一 E-MAP 群組

  在群組名稱上按右鍵顯示快捷選單，然後選擇編輯 E-MAP 或移除 E-MAP。




- 樓層 E-MAP 群組

  在群組名稱上按右鍵顯示快捷選單，然後選擇編輯［樓層 E-MAP］或移除 E-MAP。



若要編輯或移除樓層 E-MAP 群組的特定樓層，請在樓層名稱上按右鍵，然後選擇編輯 E-MAP 或移除 E-MAP。

## 6.2 IE 網路瀏覽器

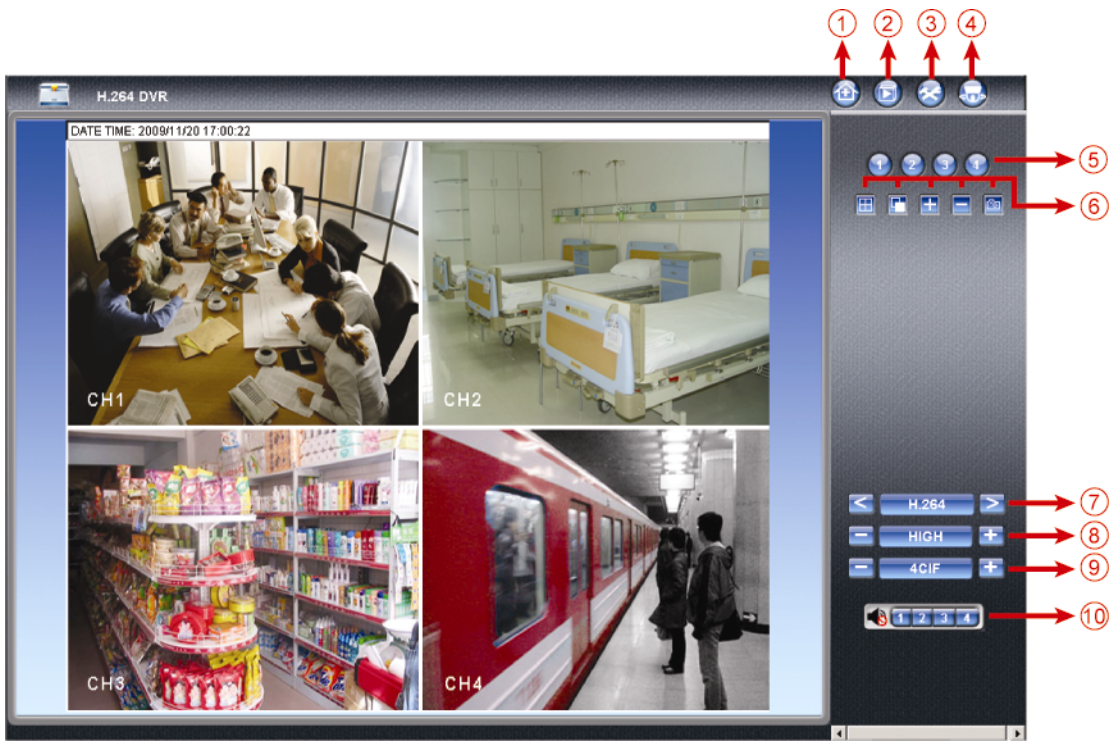
您可以透過 IE 網路瀏覽器來查看 DVR 影像或操控 DVR。

**註：** 支援的電腦作業系統爲 Windows 7、Vista、XP & 2000。

步驟 1：將 DVR 的 IP 位址鍵入 URL 位址列 (例如 60.121.46.236)，然後按 Enter 鍵。之後會提示您輸入使用者名稱和密碼來登入 DVR。

如果您設定的 TCP 埠並非 80 埠，就需要另行輸入埠號，格式爲 ***IP 位址*:埠號**。舉例來說，若 IP 位址爲 60.121.46.236 且埠號爲 888，請在 URL 網址列中輸入 "http://60.121.46.236:888"，然後按 Enter。

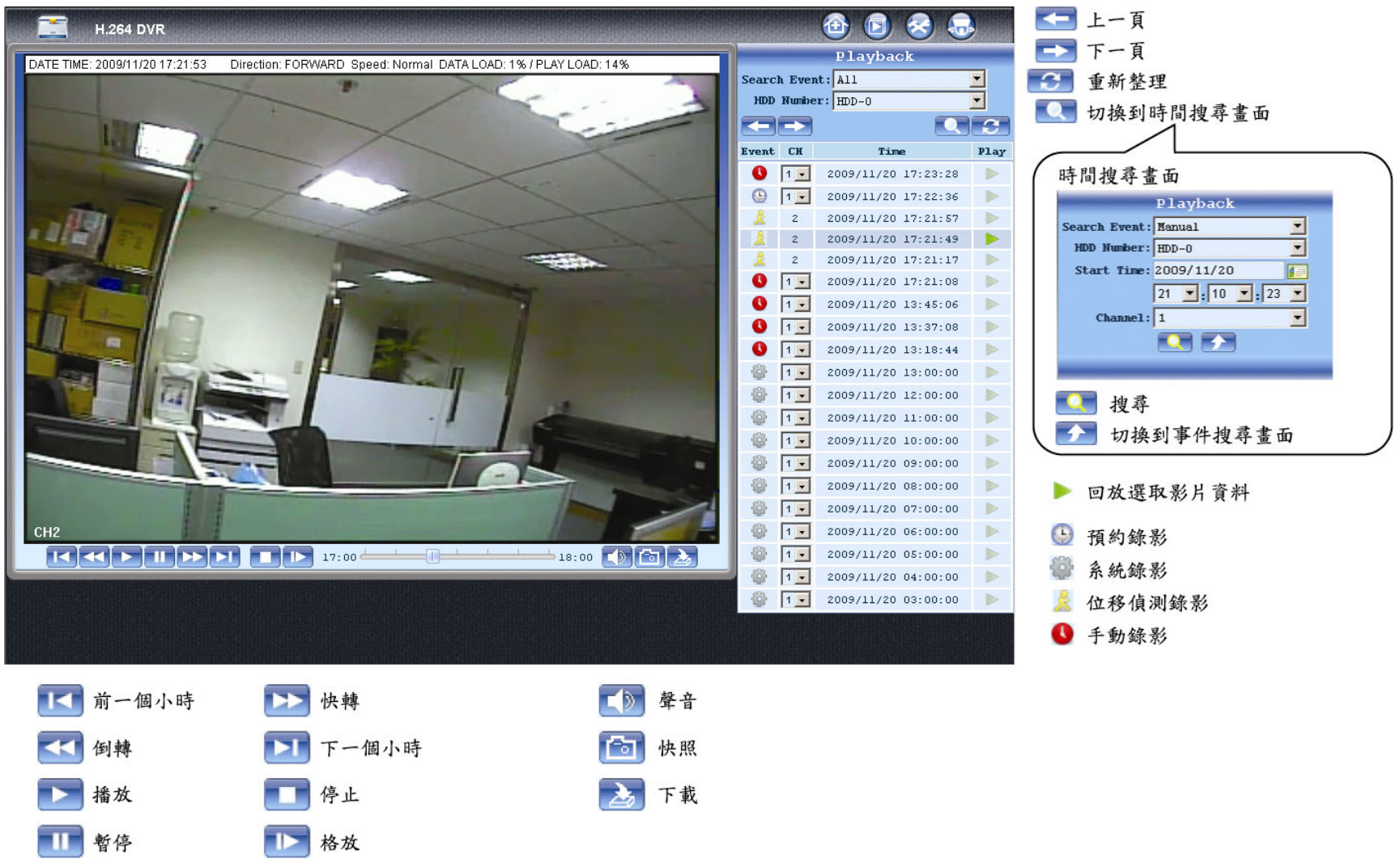
步驟 2：輸入使用者名稱和密碼，即與 Video Viewer 登入時使用的使用者名稱和密碼相同，然後按 OK。若登入資訊正確，您將會看到和以下類似的畫面。




| NO. | 功能 | 說明 |
|---|---|---|
| 1 | 首頁 | 按 可回到 DVR 主要頁面。 |
| 2 | 影像回放 | 按 可進入回放面板，讓您可以搜尋或選取想要回放的事件，並同時下載到您的電腦。詳情請參閱第 30 頁的「6.2.1 事件回放與下載」。 |
| 3 | 設定 | 按 可進入詳細的 DVR 設定頁面。 |
| 4 | PTZ | 按 可進入 PTZ 模式。 |
| 5 | 頻道選擇 | 按其中一個數字全螢幕切換到想要的頻道。 |
| 6 | 顯示模式 | : 按一下可顯示 4 分割畫面。<br>: 按一下可依序顯示每個頻道，從 CH1 開始。顯示最後一個頻道後，就會從 CH1 開始從頭再來。若要退出此模式，請按其他頻道顯示按鈕。 |
| | 選取 | 按 或 觀看前一個 / 下一個頻道或變更設定。 |
| | 快照 | 按 擷取目前畫面的圖片，並儲存在 → General 指定的位置裡。 |
| 7 | 網路傳輸 | **H.264 / QuickTime**<br>QuickTime 是 Apple 公司的多媒體播放軟體。您必須先將 QuickTime 安裝到您的作業系統。選取 "QuickTime" 後，會提示您輸入存取 DVR 系統的使用者名稱和密碼。 |
| 8 | 變更畫質 | **BEST / HIGH / NORMAL / BASIC**<br>選擇想要的畫質。 |
| 9 | 變更解析度 | **4 CIF / CIF**<br>選擇想要的影像解析度 (4CIF: 704*480 / CIF: 352*240) |

| NO. | 功能 | 說明 |
|---|---|---|
| 10 | 聲音頻道選擇 | <br>選擇想要收聽現場聲音的頻道。<br>**註：**您的攝影機必須支援錄音，並連接到 DVR 支援錄音的影像頻道和聲音頻道。詳情請參閱第 2 頁的「1.3 背板」。<br>表示靜音。<br>若要離開靜音狀態，再按一下此圖示，然後選擇想要的聲音頻道。 |

### 6.2.1 事件回放與下載




| | | |
|---|---|---|
| / | 前一個 / 下一個小時 | 按一下可跳至下一個 / 前一個小時 (例如 1:00 ~ 12:00 或 14:00 ~ 15:00)，並立即播放在該時段中最早的錄影資料。 |
| | 快轉 | 加快回放速度。按一次以 4 倍的速度回放快轉畫面，按兩次以 8 倍的速度 … 以此類推。 |
| | 倒轉 | 增加倒轉速度。按一次以 4 倍的速度倒轉畫面，按兩次以 8 倍的速度 … 以此類推。 |
| | 播放 | 播放目前的錄影片段。 |
| | 暫停 | 暫停影像回放。 |
| | 停止 | 停止影像回放。 |
| | 格放 | 在暫停模式下，按一次可以格放一張影像。 |
| | 聲音 | 按一下可靜音，再按一下即可恢復錄音回放。<br>**註：**當攝影機支援錄音，並連接到 DVR 支援錄音的影像頻道和聲音頻道時，才能使用此功能。詳情請參閱第 2 頁的「1.3 背板」。 |
| | 快照 | 擷取目前畫面的圖片，並儲存在 → General 指定的位置。 |
| | 下載 | 下載目前的錄影片段並儲存在指定的電腦位置。 |

# 附錄 1 產品規格

| | | |
|---|---|---|
| 影像系統 | | NTSC / PAL (自動偵測) |
| 影像壓縮格式 | | H.264 |
| 影像輸入<br>(composite video signal 1 Vp-p 75Ω BNC) | | 4 路 |
| 影像輸出 (BNC) | | 主螢幕輸出：固定顯示用 |
| 聲音輸入 / 輸出 | | 4 路輸入、1 路輸出 (單聲道) |
| 最大解析度 | Frame | 704×480 pixels with 30 IPS <NTSC> / 704×576 with 25 IPS <PAL> |
| 最大解析度 | Field | 704×240 pixels with 60 IPS <NTSC> / 704×288 pixels with 50 IPS <PAL> |
| 最大解析度 | CIF | 352×240 pixels with 120 IPS <NTSC> / 352×288 pixels with100 IPS <PAL> |
| 影像品質設定 | | 超好、最好、高和一般。 |
| 硬碟儲存容量 | | 容納一顆 SATA 硬碟 (容量最高可達 2TB) |
| 快速搜尋 | | 時間 / 位移 / 警報<br>三種搜尋模式 |
| SATA 介面 | | 內建 |
| VGA 介面 | | 內建 |
| 錄影模式 | | 手動 / 預約 / 位移偵測 / 警報 / 遠端 |
| 多工操作支援 | | 即時顯示 / 錄影 / 回放 / 備份 / 網路遠端操作 |
| USB 滑鼠控制 | | 支援 |
| 位移偵測區域 | | 每隻攝影機的偵測區域皆可分爲 16 * 12 個方格 |
| 位移偵測靈敏度 | | 三種參數設定可供精準偵測 |
| 警報前錄影 | | 支援 |
| 備份裝置 | | USB 2.0 隨身碟 / 網路 |
| 網路傳輸壓縮格式 | | H.264 |
| 乙太網路 | | 10/100 Base-T，支援網路遠端監控功能 |
| 網路介面 | | 支援免費授權軟體 Video Viewer / Internet Explorer, Mozilla Firefox & Google Chrome 網路瀏覽器 / QuickTime 多媒體播放軟體<br>(最多支援五人同時上線) |
| | | *作業系統：Windows 7 / Vista / XP / 2000 |
| 網路通訊協定 | | TCP/IP、PPPOE、DHCP 和 DDNS |
| 完全遠端獨立 | | 支援 |
| 事件通知 | | 透過 FTP / E-Mail |
| IR 紅外線遙控 | | 支援 (IR 接收器內建) |
| 行動裝置監控 | | 支援 (包含 iPhone、BlackBerry & WinCE) |
| 影像縮放 | | 2 倍數位變焦 |
| PTZ 攝影機控制 | | 支援 |
| 警報輸入 / 輸出 | | 4 個輸入、1 個輸出 |
| 按鍵鎖 (密碼保護) | | 支援 |
| 本機使用權限 | | 管理者 & 操作者 |
| 影像遺失偵測 | | 支援 |
| 攝影機名稱 | | 最多支援六個字元 |
| 影像調整 | | 色相 / 飽和度 / 對比度 / 亮度 |
| 日期顯示格式 | | YY/MM/DD、DD/MM/YY & MM/DD/YY |
| 日光節約 | | 支援 |
| 電源輸入 (±10%) | | DC 19V |
| 電源消耗功率 (±10%) | | < 42 W |
| 操作溫度 | | 10℃ ~ 40℃ (50℉~104℉) |
| 尺寸 (mm)** | | 343(W) × 59(H) × 223(D) |
| 系統回復 | | 停電後復電，可自動恢復事先狀態 |
| 選購配備 | | 控制鍵盤 |

* 產品規格以實機爲準，規格修改將不另行通知。
** 尺寸公差：±5mm

# 附錄 2 相容 USB 隨身碟品牌

請先將 DVR 的韌體版本更新，以確保下表的正確性。若 DVR 與 USB 隨身碟不相容，螢幕上會出現「USB 錯誤」的訊息。

**註：**請先在電腦中將 USB 隨身碟的格式格式化成「FAT32」。

**註：**USB 備份一次最多只能備份 2GB 的影像檔案。若要備份更多錄影資料，請再設定一次時間和想要備份的頻道，然後再次啓動 USB 備份功能。

| 品牌名稱 | 型號 | 容量 |
|---|---|---|
| Transcend | JFV35 | 4G |
| | JFV30 | 8G |
| Kingston | DataTraveler | 1G |
| PQI | U172P | 4G |
| Apacer | AH320 | 2GB |
| | AH320A | 8GB |
| | AH220 | 1GB |
| | AH320 | 4GB |
| A-data | RB-18 | 1GB |
| Sandisk | Cruzer Micro | 2G |
| | Cruzer Micro | 4G |
| | Cruzer4-pk | 2G |
| Netac | U208 | 1G |
| MSI | F200 | 4G |
| SONY | Micro Vault Tiny 2G | 2G |
| | Micro Vault Tiny 4G | 4G |
| | Micro Vault Tiny | 1G |

# 附錄 3 相容 SATA 硬碟表

請先將 DVR 的韌體版本更新，以確保下表的正確性。

| 品牌名稱 | 型號 | 容量 | 轉速 |
|---|---|---|---|
| Seagate | ST3320613AS | 320GB | 7200 rpm |
| | ST33500320AS | 500GB | 7200 rpm |
| | ST3750330AS | 750GB | 7200 rpm |
| | ST31000340AS | 1000GB | 7200 rpm |
| WD | WD3200AAKS | 320GB | 7200 rpm |
| | WD5000AACS | 500GB | 7200 rpm |
| | WD6400AAKS | 640GB | 7200 rpm |
| | WD7500AAKS | 750GB | 7200 rpm |
| | WD10EADS | 1TB | 7200 rpm |
| | WD15EADS | 1.5TB | 7200 rpm |
| | WD20EADS | 2TB | 7200 rpm |
| Maxtor | STM3500320AS | 500GB | 7200 rpm |
| | STM3750330AS | 750GB | 7200 rpm |
| HITACHI | HDT725032VLA360 | 320GB | 7200 rpm |
| | HDS721010KLA330 | 1000GB | 7200 rpm |

# 附錄 4 主目錄選單架構

| | | | |
|---|---|---|---|
| | 快速設定 | 一般設定 | 頻道名稱 |
| | | | 事件狀態 |
| | | | 顯示日期 |
| | | | 影像大小 |
| | | | 畫質 |
| | | | 錄影張數 (IPS) |
| | | 時間設定 | 日期 |
| | | | 時間 |
| | 日期設定 | 日期資訊 | 日期顯示模式 |
| | | | 格式 |
| | | 日光節約 | 日光節約時間 |
| | 系統資訊 | 工具 | 多國語言 |
| | | | 管理者密碼 |
| | | | 操作者密碼 |
| | | | 升級 |
| | | | 備份 |
| | | 系統資訊 | 鮑率 |
| | | | 主機 ID |
| | | | 按鍵鎖 (秒) |
| | | | 清除硬碟 |
| | | | 回復預設值 |
| | | | 遙控 ID |
| | | | 序列裝置類別 |
| | | | 影像格式 |
| | | | 版本 |
| | 事件資訊 | 快速搜尋 | |
| | | 事件搜尋 | |
| | | 硬碟資訊 | |
| | | 事件記錄 | |
| | 進階選單 | 攝影機設定 | 亮度 |
| | | | 對比 |
| | | | 飽合 |
| | | | 色相 |
| | | | 隱蔽 |
| | | | 錄影 |
| | | | 頻道名稱 |
| | | 偵測設定 | LS |
| | | | SS |
| | | | TS |
| | | | 偵測 |
| | | | 警報 |
| | | | 移動區域設定 |
| | | 警示音設定 | 外部警示音設定 |
| | | | 內部警示音 |
| | | | 按鍵音 |
| | | | 影像遺失警示音 |
| | | | 位移偵測警示音 |
| | | | 警報警示音 |
| | | | 硬碟警示音 |
| | | | 警示音時間 (秒) |
| | | | 硬碟空間不足 (GB) |
| | | 網路設定 | |
| | | 網路對時設定 | GMT |
| | | | 網路對時伺服器 |
| | | | 網路對時間隔 |
| | | 顯示設定 | 全螢幕跳台停留時間 (秒) |
| | | | VGA 輸出 |
| | | | 顯示隱蔽字樣 |
| | | | 剩餘硬碟空間顯示方式 |
| | | | 顯示輸出位置 |
| | | | 視窗透明度 |
| | | 錄影設定 | 手動錄影 |
| | | | 事件錄影 |
| | | | 預約錄影 |
| | | | 事件錄影張數 (每秒) |
| | | | 預約錄影張數 (每秒) |
| | | | 警報前錄影 |
| | | | 硬碟覆寫 |
| | | | 事件觸發後全頻道錄影 |
| | | | 保留資料天數 |
| | | 外接裝置設定 | |
| | 預約設定 | 錄影設定 | |
| | | 偵測設定 | |

# 附錄 5 更換 DVR 電池

DVR 時間重設 (例如：在停電後) 會導致錄影資料錯亂，使用者可能會找不到想要的錄影片段。爲了避免讓 DVR 時間重設，DVR 本身有安裝一顆非充電式鋰電池 *CR2032*。

但是 DVR 的時間還是有可能會重設，因爲 DVR 電池電量不足或已耗盡所致。若時間真的重設，請立即依照以下指示來更換 DVR 的電池，CR2032。

- **如何更換 CR2032**

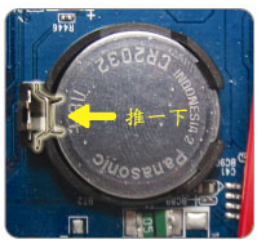
**註：** 鋰電池 CR2032 爲非充電式電池，需另行購買。若需進行更換，請使用相同或同款類型的電池以避免發生危險。

步驟 1：立即停止 DVR 錄影，以避免錄影資料時間錯亂。若有必要，請備份所有錄影資料。

步驟 2：將 DVR 關機，並中斷 DVR 電源。

步驟 3：取下 DVR 上蓋，找到主機板上的電池。

步驟 4：推一下彈片取出電池。




步驟 5：將電池的 CR2032 那面朝上，然後裝入主機板。

步驟 6：裝回 DVR 上蓋並上電。步驟 7：設定 DVR 的日期和時間，然後恢復錄影。詳情請參閱第 5 頁的「2.4 日期與時間設定」和第 12 頁的「5.2 錄影設定」。